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TEXTILE BULLETIN

VOL. 45

NOVEMBER 23, 1933

No. 12

VICTOR MILL STARCH

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TEXTILE BULLETIN



VOL. 45—No. 12

NOVEMBER 23, 1933

President Cannon Reports Work of Cotton Committee*

WHEN we adjourned our Annual Meeting a year ago, we only knew our A. B. C.'s—there was no N. R. A. or A. A. A. We are engaged in one of the oldest industries, endeavoring to adjust it to new conditions.

I am not going to discuss the many problems which we are overcoming each day in adjusting our operations to these new laws. I hope we will have a full discussion of all our difficulties during this meeting.

The National Industrial Recovery Act is a part of a great plan that is being tried in this country during the emergency to increase employment, increase wages, and control potential over-production. If we consider for a moment the condition of industry and employment in January, February and March of this year, we will be convinced that the bad in our new laws is greatly outweighed by the good. We will meet our problems, conquer them and make a success of the N. R. A.

The elimination of child labor under Code No. 1, cotton textiles has been given wide approval. It is with pride that I remind the members of this Association that we have been the leaders in this State for more than twenty-five years in proposing better labor laws and compulsory school laws. The officers and members of this Association have been consistent advocates of improved laws for child labor, shorter hours, compulsory school attendance and longer school terms. I recently noticed an article which stated that on account of the elimination of child labor that many schools were overcrowded. This condition could not be attributed to North Carolina. The years following 1920 were building years for our public schools. The compulsory school law increased the attendance to such an extent that it took several years to meet the demand for more room. This State through the co-operation of its entire citizenship has had the benefit of twelve years of supervised school attendance.

The Agricultural Adjustment Act has brought its problems. The processing tax has been applied to cotton and other farm products. It is to be regretted that the Secretary of Agriculture and his advisors apparently have not understood that the farmer whom he is trying to help is the cotton manufacturers' best customer. There is no conflict between the farmer and the cotton manufacturer. Higher prices for farm products necessarily mean higher costs for the things that the farmer buys. It should not be overlooked, however, that the farmer will pay his mortgages, interest and taxes much easier with higher priced commodities. Statements issued by the Department

of Agriculture have been misleading. I am afraid that consumer resistance to the increased costs, caused by higher wages, shorter hours, higher cotton and processing tax, is being built up by the Department of Agriculture. If the Recovery Plan is to work successfully, we need the co-operation of the Department of Agriculture.

If the consumption of cotton is to be maintained or increased, we must have a compensating tax on competing fibres. We have about 450,000 employees and if we are to maintain this number, we must have protection from other fibres, a substantial part of which are imported. It is of prime importance to our farm population that the industry be enabled to continue its payrolls. The industrial employee is, in turn, the farmer's best customer.

The Cotton Textile Industry has supported the President's Recovery Program, whole-heartedly, from the first. I do not think we should expect less than a sympathetic, co-operative spirit from all departments in Washington.

STATE LEGISLATION

An important activity of this Association has been in the realm of State legislation, and other matters pertaining to the industry within the borders of this State.

Your legislative committee rendered a valuable service by keeping in close touch with all legislation pertaining to the industry, and endeavored to keep the members fully informed at all times. It is not possible to give you an outline of all of the work which was done by this committee; however, by way of illustration in order that you may realize the importance of our legislative work, more than thirty bills were introduced pertaining to the Workmen's Compensation Law alone. These bills ranged all the way from an effort to abolish the law entirely to an effort to increase the schedule from \$6,000 to \$15,000. Only six changes were made in the Compensation Law, and our members were advised as to these changes.

TAXATION

Your committee on taxation was active throughout the year, and especially during the session of the General Assembly. Among other matters considered by them was bill introduced in the Senate which provided for additional public revenue by imposing a tax upon the production and manufacture of all fabricated products. A committee from this Association appeared before the joint finance committees of the Senate and House. Arguments were made setting forth the status of the textile industry and testimony was introduced showing the inability of the textile industry to bear tax of this kind. In due course this bill received an unfavorable report.

There were many other matters of taxation which received the attention of the committee during the year.

*Address of President Chas. A. Cannon at the Annual Meeting of the North Carolina Cotton Manufacturers' Association, Nov. 17, 1932, Pinehurst, N. C.

MEMBERSHIP

Within the past few months twenty-four (24) new mills have been added to our membership. This is very gratifying, as it enables us to more nearly represent 100 per cent of the industry.

COTTON

The cotton committee has been on its job throughout the year.

On March 13th-17th of this year the Fifth International Universal Cotton Standards Conference was held in Washington. This Association was ably represented by members of the cotton committee. Our committee made a complete report of the work accomplished at this conference, a part of which report is as follows:

"The European Associations withdrew their request for changes in the good middling and strict good middling boxes, and for the time being no changes are contemplated. However, the department stated they intended to make a thorough survey of the whole standards situation, as they were vitally interested in the adequacy, accuracy and effectiveness of the standards, and if they have any suggestions to make, will do so some time in the future.

"Foreign Association unanimously favored an interval of three (3) years, instead of two (2), between the Standards Conferences. The department took the position that in view of the fact, they had no definite data as to the actual changes that take place in cotton, and as they intend to make complete survey of the cotton standards, the results of which might have considerable bearing on the matter, they didn't think it would be well to approve, at present, an extension of time to three (3) years.

"In regard to the laboratory work, the matching of the new boxes to the key set. We encountered considerable trouble, especially on the middling and strict low middling boxes. The boxes the department prepared for submission on these grades were put up too low. The color of most of the samples was too dull, the preparation was very bad, and with a little too much leaf, which caused a great deal of squabbling and unnecessary loss of time in getting the boxes worked up so they could be approved. The shippers' representatives were trying to keep them as low as possible and the manufacturers' representatives were fighting to keep them fully equal. The foreign representatives, especially several of them, were and have been in the past of inestimable value in helping keep the boxes equal the key set. They are very particular not to approve the boxes unless they are equal, and are equally as particular that the boxes are not better than the key set.

"It is the custom of the foreign trade to consider the purchase or sale of a particular grade as being the average of that particular grade box, but in the United States the Government says that if cotton is equal to the low sample in a particular grade box it is to be considered of that grade, so a whole shipment could equal the lowest sample in any particular grade box and be okay. The European delegates were, therefore, more particular as to the average of the box than as to any particular sample being an exact match. However, your representatives had to be very particular that the lowest samples in the boxes being approved were fully equal to the low samples in the key set.

"The European delegates, in a very friendly way, suggested if possible next time that the department put up the boxes to be submitted a little closer to the key set, pointing out that it would save lots of trouble. The manufacturers' representatives concurred in this request and the department seemed willing to do so if possible. In this connection, at the request of the manufacturers' representatives a third, or extra, key set was selected,

compared and made equal in every respect to the first key set, which is always sealed and put into the vault until the next biennial conference; this third key set to be set aside and not disturbed in any way until the Department of Agriculture gets ready to put up boxes for approval at the next biennial conference in 1935. With this exact reproduction of the key set, as a guide, for putting up the boxes to be submitted at the next biennial conference in 1935, should make it possible for the department to make them up a nearer match to the key set, eliminating much of our past trouble.

"Without this comment referring to the writers, we wish to commend the Association for the valuable work done for the manufacturing industry, by the manufacturers' representatives from the various associations, at this and past conferences. While all desired has not been accomplished at any conference, the interest of the manufacturing industry has been well served. Experience as to the work of the conferences is worth a great deal, and quite a few of the representatives have regularly attended past conferences."

With reference to the staple standards, this Association, together with the American and other Associations, have been trying to get the department to put out standards with better character and of the proper length, but have accomplished nothing with the bureau along this line. It appears to me, on the whole, we now have the poorest staple standards for length and for character we have ever had. While the representatives we have sent to Washington for staple conferences have done all they could with the department to get better staple standards, the mills have probably been a little too complacent; have been swallowing their medicine and not putting up the proper protests regarding same. We all realize the continued lowering of these standards cost the mills money.

It is true that when staple conferences are held, bales are selected on approval of representatives present, but when such selections are made the department brings out samples from each key bale and instructs that selections are to be made based on those particular samples for length of staple only and will not permit character to be considered. They also state that after the conference is over, if the department finds any bale they consider too poor or too good they will automatically discard same. This, together with the poor character of cotton they have been submitting for the selection of these standards, really throws the responsibility on the department for the poor quality of the standards.

In view of the shortness of staple of the present crop over the entire belt, together with the poor staple standards we are having to work on, it would appear that we are slated for considerable grief.

TRAFFIC DEPARTMENT

The traffic committee, in co-operation with Mr. Cunningham, has rendered its usual valuable service during the year.

The traffic department, in addition to their regular work of checking freight bills and collecting overcharges, has rendered valuable service in helping to secure reduced freight rates for the mills.

Mr. Cunningham will make detailed report for the traffic department, but I wish to call attention to a few matters of importance. In May of this year various interests, together with the traffic department, successfully blocked proposed reduced barge rates for cotton on the Mississippi and Warrior Rivers. Of course, every

(Continued on Page 27)

Dyehouse Troubles *

BY MALCOLM MACKENZIE

Sandoz Chemical Works, Inc., Charlotte, N. C.

DYEHOUSE troubles are many and varied and my main difficulty is knowing just where to start; some are due to faults in previous processes such as uneven spinning, tight and loose twisting, or uneven tension in the knitting or weaving. As a rule these do not show up until the dyeing has been started and unless the dyer can cover them up he is very likely to be blamed. Of course prolonged boiling, when possible, sometimes helps but as a rule it is almost impossible to get satisfactory results when the goods are not properly made. The dyer in a mill has it much easier than a job dyer for he can trace the fault back to the department that caused it and perhaps have it corrected in future lots.

Mr. Schroeder stated that this paper would deal with raw stock, hosiery and wool. The raw stock dyer, however, has fewer dyeing troubles than any other as he is the first to handle the stock. If his material is properly opened, his machines clean and evenly loaded, and his preparation, such as scouring or wetting-out, thorough, his troubles should be negligible. The only real trouble that the raw stock dyer is apt to have to contend with is lack of equipment, and when he is being rushed he may try to dye a batch in a kettle or piece of equipment that is not suitable. Some time ago a dyer on raw wool was in a hurry and his regular kettle was busy so he tried to dye a camel hair shade by the top chrome method. He forgot that the steam pipe was brass and as a result his lot came out too dull in shade.

Many troubles are caused through false economy in trying to save steam and time, in fact, I believe that more than half of all troubles originates from improper preparation due to these causes.

Recently a concern that was dyeing cotton roving on a package machine complained that they could not get level dyeings on their light shades though they had little or no difficulty with their medium and heavy shades. Due to the shape of the package, which was similar to a bobbin, the circulation had to be run continuously from the outside of the package to the perforated core and the dyeing had not penetrated much over an inch. On investigating it was found that the material had been treated for about ten or fifteen minutes at a temperature of about 180 with a good penetrating agent. Another dyeing was made using only one-half the amount of the same penetrating agent but the goods were boiled for one hour and then the same dyestuff was used. The result was perfect penetration showing simply that the material in the previous lot had not been properly wet-out. On account of the short time allowed at a temperature lower than the boil the material had been wet-out only about one inch from the outside of the package. Since only a small quantity of dyestuff was used, naturally it had exhausted itself on the wetted-out material only.

Woolen yarns or pieces that have been properly and thoroughly scoured will dye quite easily if the proper dyestuffs are used. A short time ago a manufacturer of mohair plushes complained that his materials crocked badly and his first thought was that he was using the wrong type of color although his dyer had selected the fastest colors he could get to withstand crocking. Upon

investigation it was found that, while his material dyed evenly and withstood every other test, there was a small amount of wool grease left in the goods. Another lot of material was thoroughly scoured by a different process and tested before dyeing to show that the grease had been properly removed, and then the goods were dyed exactly as before, using the same method and formula, and after finishing no crocking was evident. The main trouble had been that they were trying to do the job too quickly and had not taken time or care to prepare the goods properly.

In the dyeing of rayon hosiery a thorough cleansing is necessary to remove the oils that have been used in the manufacture of the rayon. This is essential in order to produce level dyeing. The selection of dyestuffs depends largely upon the type of rayon used, since some rayons have a greater affinity for dyestuff than others. This can be easily controlled by the judicious use of salt and the proper control of temperature so that the cotton and rayon produce a good union.

Selection of proper dyestuff will eliminate many difficulties. The dyer on full fashioned silk hosiery apparently appreciates this more than the average dyer. As a rule he not only selects colors to dye his silk that no more than stain his cotton but also often has cotton colors that will not dye silk. A few do still use cotton colors that will dye both cotton and silk and then use shading colors to tone up the silk but leave the cotton white. Wherever possible all colors used must discharge to a pure white for the style changes vary so that the stock on the shelves today may have to be stripped and redyed an entirely different shade the following week in order to be saleable.

A manufacturer of narrow fabrics on dyeing a tape found that, after drying, the selvedge was slightly darker than the face and when rolled the side was an entirely different shade than the body of the tape, in fact, the difference was so great the customer refused to accept shipment. Several experiments were made using the same dyestuffs. The orange used in the combination had a tendency in drying to run to the sides, so a different combination of colors was used and this trouble was eliminated.

In dyeing cotton skein yarn pastel shades on a bleached bottom, care should be taken in the bleaching. Yarn that has been bleached by the peroxide or the sodium hypochlorite method seems to give little or no trouble, but where the yarn has been bleached in a vat with calcium hypochlorite it is almost impossible to avoid streaks in dyeing. This is probably due to channeling during the circulation of the bleaching liquor and small quantities of calcium being deposited on the goods. In dyeing pastel shades if slow exhausting colors are used and little or no salt the dyeings seem to be more level.

Some time ago there was a demand for a bleached white half hose with a colored celanese clock or stripe. In order to get a good clear white the goods had to be bleached first and then dyed with special colors for celanese afterwards. While these colors are not supposed to dye cotton they will stain to a certain extent and this, of course, spoiled the clear white. Fortunately, many of the colors used for dyeing acetate silk are very fast and will

*Paper before South Central Section, American Association of Textile Chemists and Colorists.

(Continued on Page 24)

Textile Costs Under the NRA *

BY RALPH E. LOPER

Industrial Engineer.

NEARLY every person here has been close to the Cotton Textile Industry during the recent past. You all know the splendid spirit of co-operation this industry has shown toward the Administration, and how, under the able leadership of the Cotton-Textile Institute, your recommendations for a code were presented to General Johnson a few hours after the National Industrial Recovery Bill became a law. As a result, you began operating under Code No. 1 on July 17th, about three weeks in advance of any other industrial code.

Most of you have been a part of this industry for many years. You knew it at its peak of expansion in 1923 when it had 38,000,000 spindles in place. You have seen its available productive equipment reduced to the level of 1910, although the population of the United States has increased more than 35 per cent since 1910. During this period since 1923 mills with about 7,500,000 spindles, representing an original investment of approximately \$150,000,000 were dismantled and no new mills have been built to take their place.

In 1929, when the New York stock market was establishing record high prices, and when the Dow Jones industrial averages were over three and one-half times their 1923 values, you saw the average price of Southern cotton mills' stocks only 62 per cent of their 1923 values. New England textile shares showed much greater depreciation.

You know from your own experience that the cotton textile industry did not share broadly in the general prosperity of the middle twenties. Therefore, if any year during this period is to be selected as a basis for judging present conditions, it will be easy for you to keep in mind the special position of the cotton textile industry during this base period.

The United States Department of Commerce has selected the year 1926 as a basis for judging present conditions, and uses the average wholesale price of cotton goods during that year as 100 per cent for the basis of their index of cotton goods prices.

A compilation based upon the Federal income tax returns from 1,060 cotton textile mills for 1926 shows that combining their profits and losses leaves a net deficit of \$32,463,000, after income taxes. Nineteen hundred and twenty-six may represent normal prosperity for industry in general, but it was an unfortunate year for the textile industry.

Considerable emphasis has been repeatedly placed upon the relation between the price of cotton and the price of cloth during the past ten years. The suggestion has been made that this period should be considered as normal. Let us, however, examine the facts. A careful study based upon income tax returns during five of these years and upon published statements for years on which income tax data is not available indicates that the net deficit of all these cotton mills during this whole ten-year period was more than \$100,000,000, after income taxes.

HOW CODE AFFECTED PRICES

With these facts clearly in mind, let us see how the situation has been affected by the code.

*Address at the Annual Meeting of the North Carolina Cotton Manufacturers' Association, November 17, 1933, Pinehurst, N. C.

The following provisions of the code had a direct and important effect upon the manufacturing cost in every cotton mill:

1. The 40-hour week for textile operatives.
2. The same weekly pay for 40 hours as was previously paid for the longer week.
3. A minimum wage of \$12 in the South and \$13 in the North, with much higher wages for skilled employees.

The 40-hour work week and the 80-hour limitation on productive machinery were intended primarily to spread employment, and they have accomplished this in a most effective way. The prospect of the short week and higher costs under the code increased employment prior to the adoption of the code so that the full effect on employment can only be seen by going back to the middle of March. At that time, 320,000 operatives were employed in the industry and by September 1st, these had increased to 466,000. Here we have a gain of 146,000 operatives or over 45 per cent.

Due to increased employment and higher wage rates, the payrolls of the industry increased from \$12,800,000 in March to \$27,000,000 in September. This represents a gain of \$14,200,000 or 111 per cent.

FACTORS AFFECTING COSTS

These three provisions of the code increased the manufacturing cost of textile mills in all sections of the industry. There was an increase of over 100 per cent in the labor costs of many mills. The average labor cost per unit of product for the industry as a whole increased 70 per cent.

The 40-hour week with an 80-hour limit on machinery increased the cost per unit of product for taxes, insurance, obsolescence and all the other fixed items of overhead which must be spread over a smaller weekly production.

The costs of fuel and supplies of all kinds and machinery replacements have also materially increased because other manufacturers are operating under codes which have increased their costs and compelled them to obtain higher prices.

PROCESSING TAX

On August 1st a processing tax amounting to 4.2 cents per pound net weight of cotton opened was applied to the textile industry. This adds from 30 to 45 per cent to the cost of cotton.

This tax is expected to yield between \$110,000,000 and \$125,000,000 during the cotton year of 1933 and 1934, yet it is spoken of as being unimportant to the ultimate consumer amounting to less than 8 cents on a sheet, 8¼ cents on overalls and a trifle over one cent per yard on unbleached muslin, etc. Actually this tax will collect from the consumers in one year more than the combined net profits of the cotton textile industry during the best year it has had since the world war.

The processing tax amounts to over six times as much as the cotton textile industry pays for all State, county and municipal taxes combined. This sum would have paid all the operatives employed in the cotton textile industry in March, 1933, for a period of nine months at the rates then prevailing.

(Continued on Page 10)

When you smoke



Acids	Tapioca Flour
Alkalis	Sago Flour
Bichromates	Gums
Alums	Oils
Potashes	Softeners and
Prussiates	Finishes
	Dyewoods

How few of us, puffing a "smoke," are conscious of the industries this familiar object represents . . . and especially of the chemical-using industries (those, *we serve!*)

And yet, there they are . . . the tobacco industry, the wood industry if you smoke a pipe . . . paper, in tobacco packages and on cigarettes . . . wood and sulphur in the match . . . printing inks, glassene, glue—industries widely separated, but all meeting in these everyday objects, the pipe or cigar or cigarette—and all requiring *chemicals*.

American Cyanamid & Chemical Corporation's products are pretty likely to be there, "when you smoke!"

AMERICAN CYANAMID & CHEMICAL CORPORATION

5 3 5 F I F T H A V E N U E . N E W Y O R K

Butterworth Announces Tube-Tex Machine

A new machine that extracts, processes, dries, finishes, conditions and measures tubular knit goods, all in one continuous operation, is now being made by H. W. Butterworth & Sons Co., of Philadelphia.

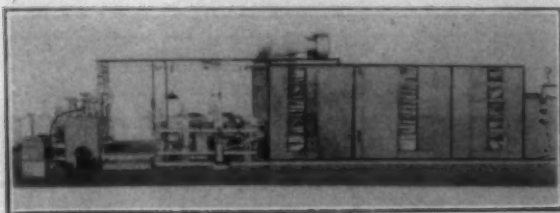
Only two operators are required on this machine—a third being required for sorting and sewing.

This machine is known as the Tube-Tex. It is claimed that from 2,800 to 3,000 yards of fabric can be processed and finished in eight hours.

The advantages claimed for the machine are: That it saves 10-25 per cent in horsepower—50-75 per cent floor space—considerable steam and reduces labor costs from 50 to 75 per cent. Any reasonable desired regain can be obtained. Losses at the end of the rolls are never more than three inches. The quality of the fabric is improved. There is a uniformity of face and width. The yield is controlled and all moire is eliminated.

In addition, a wide range of desirable finishes can be obtained. This is of great assistance in the merchandising of flat woven goods.

In the processing operation the fabric, preparatory to passing through the machine, may be wet or dry in rope or flat form. It passes through the machine in



Tube-Tex Machine

continuous endless length at the rate of from 25 to 35 yards per minute.

The fabric can be taken directly from a dye beck and passes through pot dye guides. Afterwards, it is opened up fully by a driven spreader which is really the heart of the machine. This consists of two upper and two lower horizontal rollers; also two smaller vertical rollers on each side.

One each of the upper and lower rollers is driven. The two side rollers are driven by spur gears. By regulating the speed of these rolls, fabric can be stretched or allowed to run full. The fabric, after it is stretched to its full dimension by the driven spreader, is passed under the immersion roll, and then through squeeze rolls. If finish is required, the liquid for delustering, sizing, stiffening, etc., may be poured over the goods at the top of the squeeze rolls, squeezed, and then allowed to run down to the immersion pans, from which it is recirculated.

From this machine the goods pass into the drier, which is made of asbestos-lined sheet metal. The house is 20 ft. long, 36 inches wide, and has five horizontal air passages. The bottom passage holds four layers of fabric, and the other passages three layers each.

The fabric is carried through the drier, free from tension at all times, except where tension is applied by spreader units.

There is a mechanism which insures uniformity; tension being applied to the fabric as it emerges from the drier, and before it passes to the final finishing machine. The heat from the drier is exhausted from the top, and

drawn in at the bottom. From the drier the goods enter the finishing machine.

Here the fabric is steamed from top and bottom, and opened up by the driven spreader. It is steamed again, and passes through the finishing rolls. Before being wound up it is cooled by a process which insures the proper amount of moisture being left in the fabric.

The driving of the entire machine is done by DC motors, of which there are three. An AC-DC motor generator set is part of the equipment of each machine. A separate hand control governs the speed of all three motors at one time, insuring perfect synchronization. There is a feeder control between the various units of the entire machine.

Operation is by push button control at each end. The machine is also equipped with signal lights, and has a semi-automatic arrangement which slows the machine when cutting and doffing is being done.

The separate units of this machine can be supplied. A single unit at the beginning of the machine can be used for processing after the goods have been centrifuged. A second unit, similar to the first, except that it has an extra set of squeeze rolls, permits the goods being taken directly from the dye beck kettle.

It is claimed for the machine that the goods can be taken from the dye kettle, and finished in roll form in five minutes.

The Tube-Tex machine is particularly adaptable to the finishing of silk, rayon, cotton, wool, worsteds, or mixtures.

Specifications for Shrinkage of Woven Cottons

(Adopted on Oct. 26, 1933, by the Textile Shrinkage Conference, a committee organized by the Textile Section of the N. Y. Board of Trade.)

GROUP 1

Rule 1—Grade AA Shrinkage—Woven cottons shall not be designated by a designation Grade AA Shrinkage, if when tested by the method hereinafter described they shrink more than 1 per cent in either length or width direction.

Rule 2—Grade A Shrinkage—Woven cottons shall not be designated by a designation Grade A Shrinkage, if when tested by the method hereinafter described they shrink more than 2 per cent in either direction.

Rule 3—Grade B Shrinkage—Woven cottons shall not be designated by a designation Grade B Shrinkage, if when tested by the method hereinafter described they shrink more than 3 per cent in either direction.

Rule 4—Grade C Shrinkage—Woven cottons shall not be designated by a designation Grade C Shrinkage, if when tested by the method hereinafter described they shrink more than 5 per cent in either direction.

Rule 5—No woven cotton shall be designated by the term "preshrunk" if when tested by the method hereinafter described they shrink more than 3 per cent in either direction.

GROUP 2

Rule A—The designations shall be legibly stamped on or firmly affixed to the material and shall appear on all invoices, labels or marks relating to such goods.

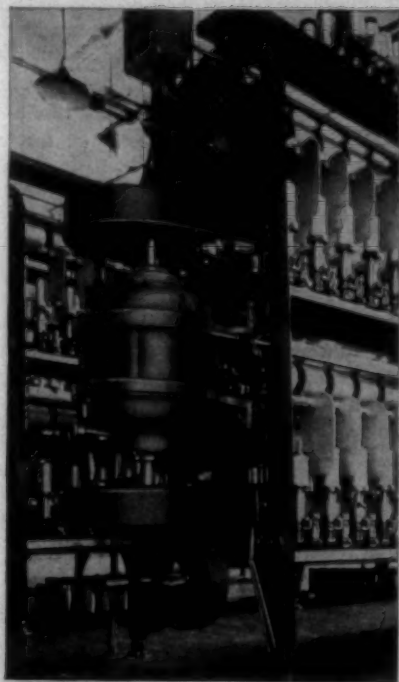
Rule B—Woven cottons coming under Rule 1 shall be legibly stamped with, or have firmly affixed thereto, a designation reading "Grade AA Shrinkage."

Rule C—Woven cottons coming under Rule 2—Shrinkage, shall be legibly stamped with, or have firmly affixed thereto, a designation reading "Grade A Shrinkage."

(Continued on Page 25)

When you **BUY** **SILK-TWISTER DRIVES** *do you weigh ALL factors?*

Full Value Is Obtained with G-E Motors and Control



G-E motor driving double-deck silk-twister—one of a battery installed in a large silk mill

TO the purchaser of silk or rayon twisters, motors may seem very much alike. Their mounting dimensions are essentially the same. Their electrical ratings are similar.

BUT THERE ARE DIFFERENCES. And the over-all cost of the drive is determined by many factors—factors which include not only direct operating and maintenance expense, but also such considerations as dependability, durability, service facilities, and manufacturer's responsibility.

It is significant that so many experienced textile men—buyers who weigh *all* factors—invariably specify G-E motors and control with *whatever type and make* of twister they order. To these men, G-E motors and control are the standard of full value.

They know that G-E drives are economical in operation, low in maintenance, long in life, and dependable in performance. They know that General Electric stands squarely back of its customers, with conveniently located warehouses and service shops always ready to offer prompt assistance. And they know that the complete G-E line of equipment enables them to entrust *one* manufacturer with the undivided responsibility for all their electrical needs. General Electric, Schenectady, New York.



200-781

GENERAL ELECTRIC

Textile Costs Under the NRA

(Continued from Page 6)

Mills making coarse carded cotton yarns find that even under the code, the processing tax exceeds their total payroll.

Narrow sheeting mills find that what they pay for processing tax would be sufficient to buy their power, fuel, and all mill supplies, then to pay for all repairs, insurance, office expense, salaries and village welfare. There would still be enough processing tax left to pay all their State, county and municipal taxes.

Unless this phenomenally burdensome tax can be removed, it is essential for the protection of the industry that adequate compensatory taxes be levied promptly upon competing products. Already examples are numerous of customers who have changed from cotton to paper towels or from cotton to burlap bags with cancellation of orders for cotton products.

To show the actual results of operation under the code and the processing tax, a careful study has been made of the present cost of manufacturing in representative groups of Southern and Eastern mills. On November 10th the cost of cotton was added to these manufacturing costs and the total was compared with the selling price of the various fabrics and yarns.

This group of products included a standard broadcloth, a lawn, a pique, several standard print constructions, three narrow sheetings, a group of carded hosiery and warp yarns and combed yarns with mercerizing twist in ball warps.

These five groups taken together should give us a fair cross section of the industry. On the basis of prices on November 10th, they show that the cotton textile industry as a whole is now earning only a small part of the depreciation upon its plant. It is earning nothing whatever toward interest on its investment.

Whatever margin of profit the cotton textile industry had during the first two weeks under its code has gradually disappeared during the period since the adoption of the processing tax on August 1st.

Surely this industry which was the first to adopt a code and which has shown the utmost co-operation with the Administration in carrying out the spirit of the code is entitled to a new deal.

OVERPRODUCTION

The 80-hour limit on machine operation has gone a long way toward removing the menace of over-production, yet the cotton textile industry still has ample capacity, which will serve as a continuing protection for our customers. This is clearly shown by the fact that although the average activity of the industry during the three years ending with April, 1933, was 6,137,000,000 spindle hours per month, it has averaged 7,700,000,000 spindle hours per month since adoption of the code. Over 1,000 competing plants contributed to this production, and the largest unit operates only about three per cent of the spindles. Certainly there is no possibility of profiteering by cotton textile mills.

Before the products of cotton textile mills reach the ultimate consumer they usually pass through other manufacturing operations, all of which are now under codes and, therefore, have increases in cost which must be paid by the ultimate consumer.

Take for example an apron overall made from a standard 2.20-yard white back denim. A year ago this was sold at wholesale by one of the leading manufacturers for

\$12 per dozen. This was the lowest price on these overalls in many years. During the past year the direct labor and cutting cost in this plant has advanced 31 per cent. The cost for materials and trim has advanced 93 per cent. The wholesale price is now \$17 per dozen, which leaves this large manufacturer 29 cents less per dozen than he had a year ago, to cover his indirect labor, selling expense, overhead and profit.

These overalls now retail for \$1.75 to \$1.85 each and in 1926, when the wholesale price was \$19.80 per dozen, they sold for \$2.29 each. This shows that the percentage mark up at retail is now slightly less than it was in 1926.

The operatives in this plant earn on an average from 40 cents to 45 cents per hour with a minimum of 32½ cents per hour. At the low point last year they averaged 30 to 35 cents per hour.

According to data which I have obtained from some of the State departments of labor and industry, a large amount of work clothing has been made during several recent years under rates which allowed experienced operatives to earn only about 12 cents per hour. This clothing has sold at retail for prices which no legitimate manufacturer could possibly meet. The codes which have been adopted eliminate these conditions and the low prices.

Anyone investigating increases in retail prices without taking time to trace the garments to their sources are liable to reach erroneous conclusions which are unjust both to the retailer and to the manufacturer who in the past has tried to maintain decent wages for his operatives.

Take as another example a well known broadcloth shirt which at the low price during the depression sold at retail for \$1.50 each. This manufacturer has paid the following increased costs:

	Per Doz. Shirts
Cloth _____	\$2.10
Cloth finishing _____	.150
Labor, supervision, etc. _____	.552
Linings and bands _____	.136
Buttons _____	.076
Thread and labels _____	.045
Boxes, etc. _____	.080
Total of these items _____	\$3.139

The wholesale price of this shirt has advanced \$3.50 per dozen, which leaves only three cents per shirt to cover increased selling expense, administration and profit.

Of course, it is possible to find some advances in retail prices which are not justified by the wholesale prices, but our studies show that this is not common. In fact there is much merchandise still on sale in retail stores which does not represent replacement values. It is safe to say that textile prices at retail should be about 25 per cent higher by next spring. The success of the textile codes depends in large measure upon the acceptance by the general public of these higher prices. I believe they will accept them as soon as they realize that the advances are reasonable and permanent.

Textile prices are still going to remain dangerously close to manufacturing costs for some time to come unless mill executives watch their increasing costs very carefully and insist upon a price which at least includes something toward interest on investment. It will call for the best efforts of mill executives and their selling agencies to secure prices which will assure their stockholders of interest on investment. This in turn is the best assurance to our employees that the improvement in wages and working conditions resulting from the code will be sustained.

★ WHY DID YOU TURN IN YOUR LAST CAR? ★

It was running well—probably as good as it ever ran. But a new car offered you refinements over the old car—it was more modern—it was faster—and you convinced yourself it was more economical to replace it.

NOW, what about your finishing machines? They are probably working pretty well, and you are making them do—just can't bring yourself to scrap them.

But just as in the case of your old car—you'll find it more economical to replace them with new, faster machines which have

scores of refinements over the old machine. New machines give you greater yardage, better finishes, and save you money in labor and horse power. This we admit is a general statement, but we'll prove it, any time.

Ask our engineers. They'll tell you quickly just how much obsolete machines are costing you. And when you add up the column of figures showing unnecessary expense you'll install new finishing machines, because you will then know how old machines are wasting your money—just a little here and there, but it has been estimated that \$23,000,000 can be saved annually by the installation of modern finishing machines.

What part of this can you save?

H. W. BUTTERWORTH & SONS CO.

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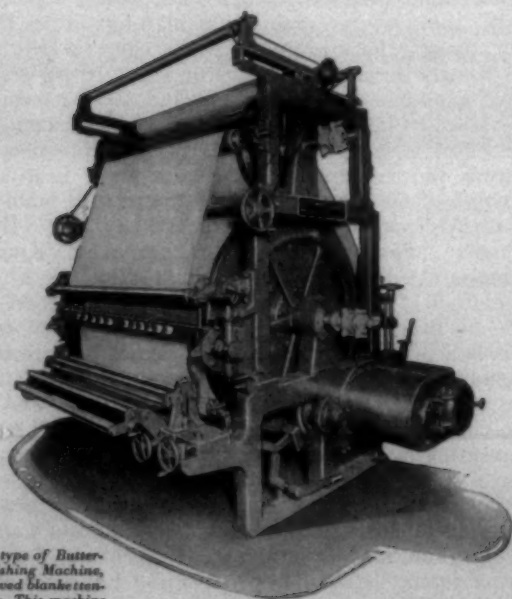
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A COMPLETE LINE OF FINISHING AND RAYON MACHINERY FOR THE TEXTILE INDUSTRY

Tensile Tests on Viscose Rayon

THE absolute value of the results obtained in any test of the tensile properties of rayon is dependent on the physical and chemical structure of the fibers of the rayon yarn. Thus the arrangement of the cellulose micelles in the fibers and the dimensions of the micelles (i.e., the degree of degradation) determine what will be the tensile properties.

MICELLE STRUCTURE OF FIBERS

When the micelles have the optimum arrangement for giving maximum strength they are oriented parallel to the fiber axis, and on being subjected to mechanical stress the micelles can only either extend, or break, or slip over one another. As the micelles are practically inextensible and as the force required to break the main valency chains of the micelles would be of the order of 800 kgs./mm., against the highest value actually found in any fiber of only about 100 kgs./mm., slippage of micelle on micelle must occur. This is confirmed by calculations made on the assumption of slippage, which gives values of the same order of magnitude as those of the best oriented cellulose fibers (Meyer and Mark, *Der Aufbau der Hochpolymeren Organischen Naturstoffe*, p. 152 et seq; Mark, *Physik und Chemie der Cellulose*, p. 161). Also such fibers are practically inextensible and crease badly, since any slight extension of one side of the fibers during bending is not subsequently recovered, as it is due to slippage. Lilienfeld viscose rayon, ramie and flax are more or less perfect examples of the class of fibers just considered. All other rayons than that just mentioned above have structures which differ to a more or less marked degree from a parallel arrangement of the micelles.

In general, viscose rayons have a better oriented layer on the outside or skin of the fiber (Preston, "J. Soc. Chem. Ind." 50, 199-203 T. 1931; Van Bergen "Chemisch Weekblad," 30th year, 55-58, 1933) while the core has a more higgledy-piggledy arrangement. As Mark has pointed out, a transposition of the structures of the skin and the core would give a fiber with the optimum textile qualities, but this goal has not been attained except in small scale experiments, though Harrison (E.P. 351,527) has described a process which claims to produce fibers with this kind of structure. Since different layers of viscose rayon fibers have different structures, extension results in slippage in the well oriented outer layer simultaneously with a rotation and parallelization of the inner higgledy-piggledy layers, till eventually a stage is reached at which no more parallelization is possible and the fiber breaks on further extension.

Viscose rayon fibers, when extended beyond a certain stage, do not recover their original length when the stress is removed; the possibility of any recovery seems to be due to strains in the micellar structure which have not been entirely destroyed by slippage between the micelles. The ability of the viscose rayon fibers to extend is thus seen to be a consequence of their peculiar structure. The more parallel the arrangement, the less the extensibility; the greater the strength and the less the resistance to creasing. The degree of parallelization of the micelles in the fiber can be determined by X-ray spectroscopy (cf. Clark and Corrigan, "J. Ind. and Eng. Chem." 22, 474-487, 1930), or by measurements of the refractive indices of the fibers (Preston, "Trans. Far. Soc." 29, 65-71, 1933) and the tensile properties deduced from the micellar theory of fiber structure and the measurements made by these methods are in agreement with the directly measured tensile properties.

CELLULOSE DEGRADATION

With fibers of identical structural type, the only other intrinsic factor is the degree of degradation of the cellulose, and the only important extrinsic factors are the moisture content and the twist. The degree of degradation as measured by the fluidity of cuprammonium solutions of the fibers is directly related to the strength of the fibers (Ridge and Bowden, "J. Text. Inst." 23, T. 319-366, 1932) on the one hand, and to the length of the micelles on the other hand as shown by Staudinger ("Trans. Far. Soc." 29, 18-32, 1933). Consequently the strength of a cellulose fiber is seen to be controlled by two important factors: the length of the micelles (i.e., the degree of degradation); the arrangement of the micelles.

The degree of degradation is shown more clearly in the tensile properties of the yarn when the yarn has received an alkaline scour. Even good quality yarns, as received from the manufacturers, lose a few per cent of strength after a mild alkaline scour, but severely degraded yarns, though already weakened, may lose a further 50 per cent of their strength. Thus damage due to degradation of a chemical character is evaluated best by making tensile tests both before and after a mild alkaline scour. For this purpose Whittaker ("J. Soc. Dyer and Col." 49, 9-19, 1933), recommends scouring for half-an-hour at 40 degrees C. in 0.5 per cent soap solution. The loss in strength produced by the scour in degraded yarns is most marked in their wet strengths, and in addition there is a marked fall in their extensibility.

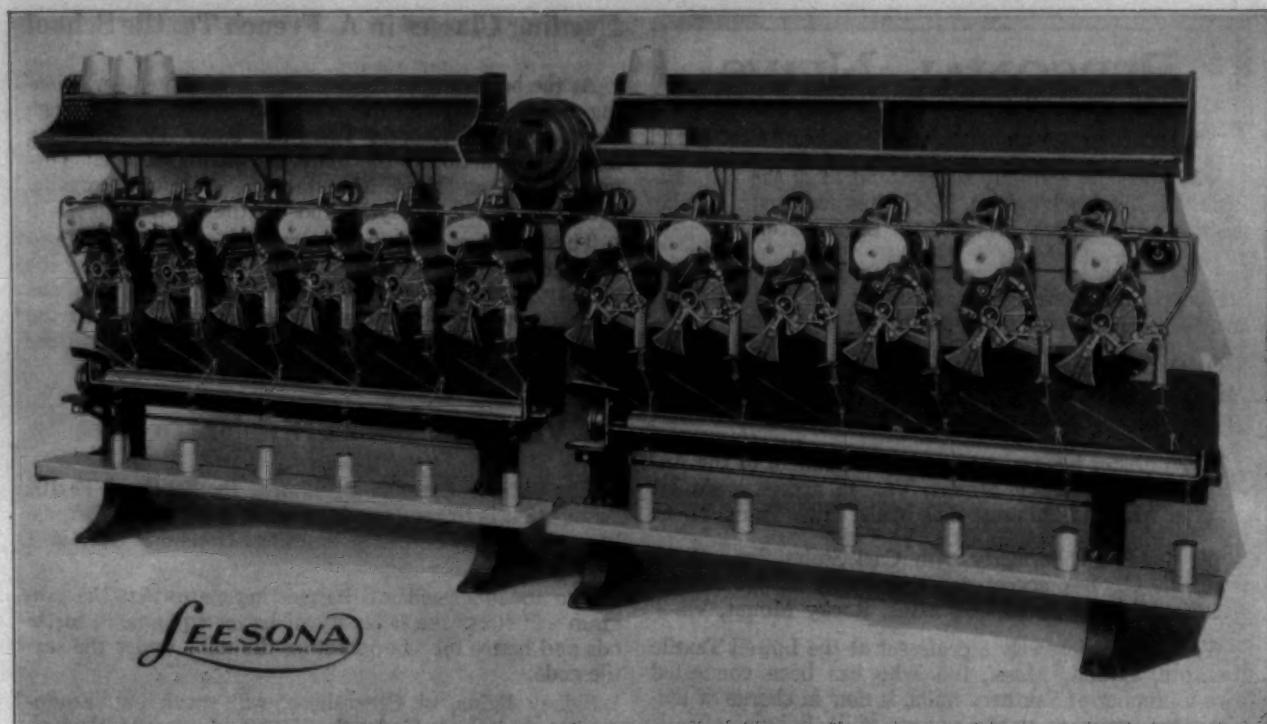
EFFECT OF HUMIDITY

The effect of the humidity of the atmosphere surrounding the yarn is important as it controls the moisture content of the yarn, which in turn exerts a big effect on the tensile properties of the yarn. Cotton (Mann, "J. Text. Inst." 18, 253 T, 1927) and flax fibers and cotton yarns (Pierce and Stephenson, "J. Text. Inst." 17, T. 645, 1926) show greater strengths at high humidities than at low, though the magnitude of the effect is only small. An increase in strength occurs of about 10 per cent relative humidities of 40 per cent and 100 per cent. On the other hand, with cellulose rayons the magnitude of the effect is large and in the contrary direction. For viscose and cuprammonium rayons there is a loss of strength of 60-70 per cent when the relative humidity is increased from 40 per cent to 100 per cent (Herzog-Wagner, "Faserstoff-Praktikum," p. 114; King and Johnson, "J. Soc. Dyer and Col." 44, 346, 1928). The magnitude of the strength loss is not quite so great in the case of Lilienfeld viscose and cellulose acetate rayons. The loss of strength of cellulose rayons with increasing humidity is a function of the degree of degradation of the cellulose. Thus, from the data of Ridge and Bowden (loc. cit), there is increasingly greater loss of strength on wetting rayon, the greater its fluidity. As far as the loss of strength with increased humidity is concerned, the rayons behave similarly to real silk, in which also there is considerable loss of strength (Denham and Lonsdale, "Trans. Far. Soc." 29, 305-316, 1933), about 20 per cent loss occurring between 40 per cent and 100 per cent relative humidities.

EXTENSIBILITY OF RAYON YARNS

The extensibility of cotton yarns (Pierce and Stephenson, loc. cit.), increases with increasing humidity, an increase of over 100 per cent occurring between 40 per cent dry when the cellulose of the rayon is not much degraded,

(Continued on Page 23)



Gear Your Methods to the Times

SILK AND RAYON require a package that is sufficiently durable to withstand commercial handling, that can be applied readily and widely to mill processes, and that delivers freely without straining the delicate fibres. Universal wound cones anticipate every requirement for a unit of distribution that is compact, versatile in use, and susceptible to rapid and economical production.

The Universal No. 50 Coner is a machine of simplified, improved construction for winding silk and rayon cones. Every facility is provided in this machine for producing uniform cones of highest quality in regard to the winding.

The No. 50 is a unit of six spindles, two of which are shown in the illus-

tration, driven in pair by a single motor. High spindle speeds and convenient arrangement contribute to high productivity from each spindle and from the operator.

Simplified adjustments of tension and pressure control insure uniform winding on all operating spindles. The gear gain mechanism effectively prevents any deviation in wind that could be reflected in the quality of the cone.

Moistening of the yarn is accomplished uniformly throughout the cone by the emulsion attachment which compensates for increasing yarn speeds, due to the building of cone diameter, by automatically increasing contact with the moistening roll.

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PERSONAL NEWS

J. W. Jenkins, formerly superintendent of the Hannah-Pickett Mills, Rockingham, N. C., has accepted a similar position with Steele's Mills, of the same place.

J. C. Montjoy has resigned as superintendent of Steele's Mills, Rockingham, N. C., a position which he has filled for the past eight years.

O. G. Morehead, superintendent of Manville-Jenckes Mills, Gastonia, N. C., has returned from a business trip to the offices of the company in Pawtucket, R. I.

W. F. Easter has resigned as superintendent of the Angle Silk Mills, Rocky Mount, Va., to accept a similar position with the Hillcrest Silk Mills, High Point, N. C.

W. B. Hagler, formerly with Carl Stohn, Inc., Charlotte, N. C., has accepted the position of overseer of weaving with the Angle Silk Mills, Rocky Mount, Va.

Will Nelson, formerly a professor at the Lowell Textile Institute, Lowell, Mass., but who has been connected with a number of Southern mills, is now in charge of textile education work at Stonecutter Mills, Spindale, N. C.

H. A. Florsheim is now in charge of sales for the Hall-Kale Manufacturing Company, Troutman, N. C. He was for years with the Gray-Separk group in Gastonia and later with Textiles, Inc.

J. W. Roberts, who has been overseer of weaving at the Angle Silk Mills, Rocky Mount, Va., has been promoted to superintendent of the plant. Before going to Rocky Mount he was with the Gibson Mills, Concord, N. C.

Mr. and Mrs. James P. Gossett, of Greenville, S. C., have just celebrated their fiftieth wedding anniversary. Mr. Gossett, head of the Gossett group of mills, with headquarters at Williamston, is one of the pioneer mill men of South Carolina.

George P. Entwistle has resigned as president of the Pee Dee Manufacturing Company, Rockingham, N. C., but will continue as treasurer for the present. He has also resigned as director of the company, as has W. B. Cole. Frank Dunlap, of Wadesboro, and Robert I. Cole have been added to the directorate.

David Clark, editor of the Textile Bulletin, was a special guest of Howard E. Coffin, chairman of the Board of Southeastern Cottons, Inc., at Sea Island Beach, Ga., this week-end, attending the meeting and outing which Mr. Coffin tendered directors of the company and a number of other textile men.

Mr. and Mrs. Waldrop Entertain

C. J. Waldrop, overseer of weaving at the Entwistle Mill No. 2, East Rockingham, N. C., entertained the superintendent and overseers of the mills at a dinner party Friday night. Besides the host, the following were present: J. M. Currie, superintendent; R. W. Ford, shipping department; Carlisle Gibson, office force; P. A. Calvert, overseer carding; P. L. Dawkins, overseer spinning; J. R. Ephland, overseer cloth room; J. S. McNiel, overseer dyeing, and C. J. Williams, master mechanic.

Evening Classes in A. French Textile School

At the beginning of the fall session in September, evening school courses in the textile department, A. French Textile School, Georgia Tech, are being offered, which include instruction in the following textile subjects: Theory of Cotton Yarn Manufacture, Fabric Designing, Weaving, Fabric Analysis, and Textile Testing.

These courses have been arranged especially to meet the demands of young men in the mills located in the vicinity of the school, and it is planned to continue the work through both first and second terms, as with the day classes, and to add additional courses in the future as they may be called for.

Virginia-Carolina Division To Meet

The Virginia-Carolina Division of the Southern Textile Association is to meet at the King Cotton Hotel, Greensboro, N. C., on Saturday morning, December 9th, at 1 o'clock.

The announcement of the meeting states that the program will stress the necessity of better equipment, methods and better men in operating the mills under the textile code.

Sidney Paine, of Greensboro, will speak on "Equipment and Methods Under the NRA." Luther H. Hodges, of Spray, has agreed tentatively to be present and to give a talk on "Men and Management Under the NRA." Both talks will be followed by discussion periods.

During a brief business session officers for the coming year will be elected. A luncheon will be given at 12 o'clock and this will be followed by an entertainment feature.

OBITUARY

BEN W. MONTGOMERY

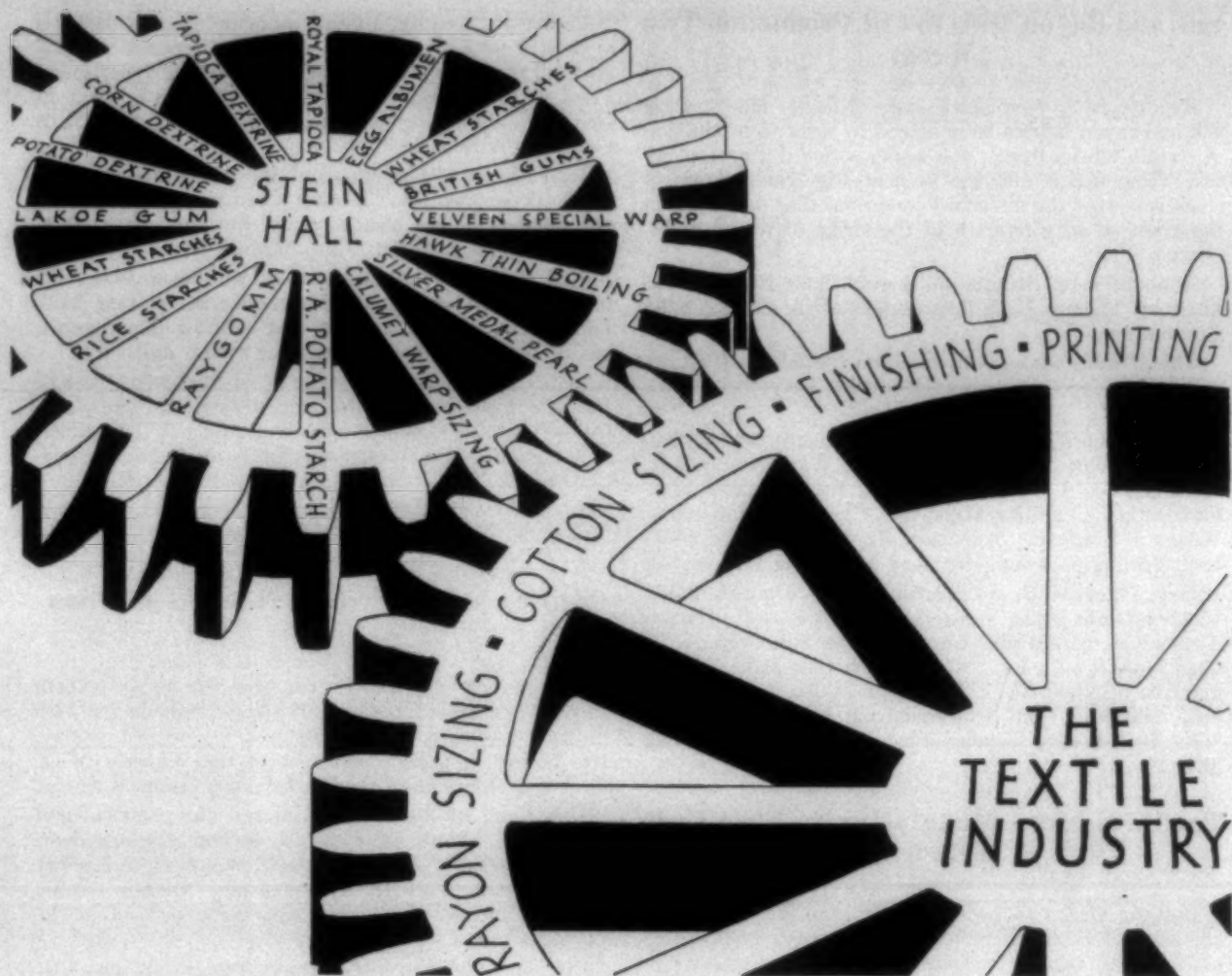
Ben W. Montgomery, for many years one of the most prominent mill executives of South Carolina, died at his home in Spartanburg last Wednesday morning. He had been in declining health for some time.

Mr. Montgomery, who was 58 years old, was a native of Spartanburg and youngest son of John H. Montgomery, pioneer cotton manufacturer, who built the Pacolet Manufacturing Company in 1882 and later built the Spartan Mills. In addition to Ben W. Montgomery, two other sons, Victor M. Montgomery and W. A. Montgomery, have been well known cotton manufacturers. W. A. Montgomery was killed in an automobile accident several years ago. Victor Montgomery is president of the Pacolet Manufacturing Company.

Mr. Montgomery was president of the Drayton Mills until some time ago when he retired on account of ill health. He served as assistant treasurer of Pacolet for a term of years. He is survived by his widow.

R. E. WEST

Arcadia, S. C.—R. E. West, former master mechanic and engineer at the Arcadia Mills, died last Saturday. Funeral services were held at Bethlehem, in Spartanburg County. Mr. West was one of the best known mill engineers in this section. He was for many years interested in the work of the Master Mechanics' Division of the Southern Textile Association and served as vice-chairman of the group.



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Silk and Rayon Mills to Cut Production Two Weeks

Reports from New York state that 31 mills making silk and rayon fabrics have agreed to suspend production of certain fabrics over a two weeks period during December. This step is taken to prevent any accumulation of stock following the disturbed conditions that developed in the market as an aftermath of the strike of recent dyers' strike.

Announcement that the mills would take this step was made by Thomas H. Hill, president of the Greyco Sales Corporation.

The 31 mills whose production on special constructions will be suspended for two weeks during December are the following:

Galey & Lord, Inc., Aberfoyle Manufacturing Co., National Weaving Co., Ashland Corp., Waypoysset Manufacturing Co., J. P. Stevens & Co., Inc., Lorraine Manufacturing Co., Dilling Mills, Inc., Cleveland Cloth Mills, Wilson & Bradbury, American Silk Mills, Colonial Mills, Inc., Burlington Mills, Hayward Mackey & Valentine.

Holt Plaid Mills, Cramerton Mills, Dunear Mills, Pinehurst Silk Mills, Stunzi Sons Silk Co., Inc., Dundee Textile Co., Stehli Silks Corp., Duplan Silk Corp., Hess, Goldsmith & Co., Inc., Susquehanna Silk Mills, Kattermann & Mitchell Co., C. K. Eagle & Co., Inc., Bloomsburg Silk Mill, The Schwarzenbach Huber Co., David Silks, Inc., Wm. J. Schepp, Inc., and New Bedford Silk Mills.

Textile Machine Manufacturers Elect Code Authority

Boston, Mass.—A code authority for the supervision and administration of the textile machinery manufacturing industry was elected here at a meeting of the entire industry at the Copley Plaza Hotel. More than 100 concerns employing upward of 75 per cent of all the workers in the textile machinery field, were represented. At the meeting, which was called by the new National Association of Textile Machinery Manufacturers, it was decided to divide the industry into 14 divisions, including parts and accessories. The machinery code was signed by the President October 3rd, and has been in effect since October 13th.

Members of the Code Authority elected were the following: David F. Edwards, chairman, Saco-Lowell Shops; John F. Tinsley, vice-chairman, Crompton & Knowles Loom Works, Worcester, Mass.; William H. Cliff, secretary, 38 Chauncy street, Boston; E. Kent Swift, Whitin Machine Works, Whitinsville, Mass.; B. H. Bristow Draper, Draper Corporation, Hopedale, Mass.; Parkman D. Howe, Universal Winding Co., Boston; S. F. Rockwell, Davis & Furber Machine Co., North Andover, Mass.; J. J. Kaufmann, Steel Heddle Co., Philadelphia; E. H. Pierce, Atwood Machine Co., Stonington, Conn., and J. E. Butterworth, H. W. Butterworth & Sons Co., Philadelphia.

Textile School Notes

The following items show recent changes among graduates of the A. French Textile School at Georgia Tech:

H. R. Brock, of the class of 1932, is now located at Thomaston, Ga., with the Martha Mills. He was, until recently, connected with the Peerless Woolen Mills, Rossville, Ga.

Luther J. McGinty, a graduate of the class of 1926, is at present with the American Bemberg Corporation, Elizabeth, Tenn., in the dyeing and experimental department. Previous to this connection, he was, for several years, in charge of the dyeing department of the Wiscasset Mills Company, Albemarle, N. C.

J. W. Swiney, a graduate of the co-operative course, textile department, has recently been made assistant superintendent of the bleachery and finishing department, Fulton Bag and Cotton Mills, Atlanta, Ga.

J. F. Childs, of the class of 1925, who for several years past has been connected with the Lanett Cotton Mill, Lanett, Ala., in the cording and slashing departments, has been made overseer of weaving at this mill.

Leo Sudderth, a recent graduate of the school, class of 1933, is with the yarn finishing department, Standard-Coosa-Thatcher Company, Rossville, Ga. A. D. Zellner, of the same class, is with the American Enka Corporation, Enka, N. C.

J. R. Newell, class of 1932, is overseer of carding, Mandeville Mills, Carrollton, Ga.

Fairley is President of N. C. Association

A. M. Fairley, well known cotton manufacturer of Laurinburg, N. C., was elected president of the North Carolina Cotton Manufacturers' Association at its 27th annual convention at Pinehurst, N. C., on last Friday. Mr. Fairley is general manager of the Waverly Mills. He is also chairman of the Carded Yarn Spinners Group.

J. A. Long, of Roxboro, was named vice-president and Harvey W. Moore, of Concord, second vice-president. Hunter Marshall, Jr., of Charlotte, was re-elected secretary-treasurer; Carl R. Cunningham, Atlanta, traffic manager, and R. H. Boykin, Spartanburg, head of the fuel department.

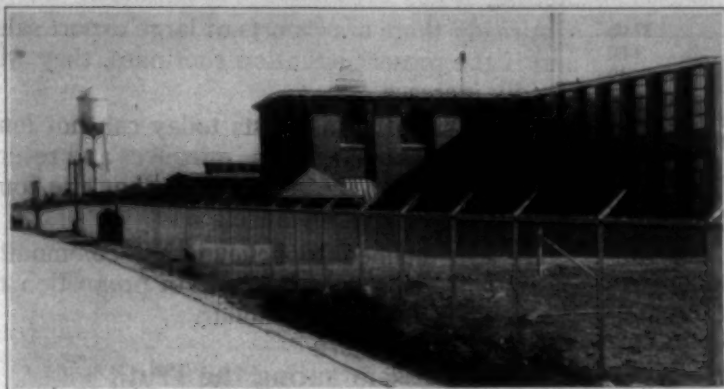
Elected to the board of directors were R. T. Grand, of Shelby; W. H. Ruffin, of Durham; J. M. Gamewell, of Lexington; A. H. Bahnson, of Winston-Salem; A. R. McEachern, of St. Pauls, and T. B. Bunch, of Statesville. W. L. Balthis, of Lowell, was given Long's place on the board when the latter was elected to the vice-presidency.

Sloan Names Board of Sales Yarn Men

After conferring with T. M. Marchant, president of the American Cotton Manufacturers' Association, and Ernest N. Hood, president of the National Association of Cotton Manufacturers, George A. Sloan, president of the Cotton-Textile Institute and chairman of the cotton textile industry committee, the code authority, announced the appointment of a sub-committee for the carded yarn group consisting of the following executives:

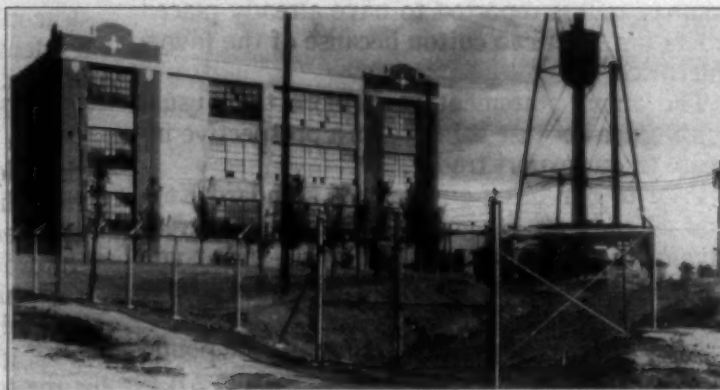
W. D. Anderson, Jr., Bibb Manufacturing Co., Macon, Ga.; Cason J. Callaway, Callaway Mills, LaGrange, Ga.; Donald Comer, Avondale Mills, Birmingham, Ala.; Sidney P. Cooper, Harriett Cotton Mills, Henderson, N. C.; Philip Dana, Dana Warp Mills, Westbrook, Me.; F. C. Dumaine, Jr., Amoskeag Manufacturing Co., 10 State street, Boston, Mass.; A. M. Fairley, Waverly Mills, Laurinburg, N. C.; B. B. Gossett, Chadwick-Hoskins Co., Charlotte, N. C.; Fred Rakestraw, former president of the Cotton Yarn Merchants' Association, Drexel Building, Philadelphia; Edwin F. Sherman, president of the Cotton Yarn Merchants' Association, Drexel Building, Philadelphia, and A. K. Winget, Efrd Manufacturing Co., Albemarle, N. C.

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A stretch of more than a quarter mile of Stewart Non-Climbable Chain Link Wire Fence Style 3TH including three 20-foot slide gates recently installed at Margrace Mills, subsidiary of Neisler Mills, Inc., of Kings Mountain, N. C. This company's property lines are now DEFINITELY DEFINED.

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OTHER RECENT STEWART INSTALLATIONS IN TEXTILE FIELD

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Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

Prospective Increase in Cotton Exports

A Bombay wireless to a London paper says that "the depreciation of the dollar in terms of pound sterling has caused great anxiety in cotton circles. There is a menace seen to Indian cotton cultivation and cotton exports. One Bombay mill is reported to have already placed orders for American cotton because of the favorable price."

The above statement is of more than usual significance because it indicates a prospective increase in our export trade.

Prior to our going off the gold standard England, already off the gold standard, had a great advantage over us in securing a world-wide trade but now the situation is reversed and we have the advantage.

A few months ago the English unit, the pound sterling, was worth only \$3.80, whereas now it is worth about \$5.40.

When the pound sterling was worth \$3.80 or less, cotton was worth 10 cents or ten pounds were worth a dollar and approximately the same price exists today.

A cotton manufacturer in England could at the old basis get 38 pounds of cotton for his pound sterling, whereas now he can get 54 pounds, which is equivalent to his now paying 7 cents for cotton as against the former price of 10 cents.

As a matter of fact the English cotton manufacturer, measured in his own money, is now paying no more for cotton than before the NRA began.

While this is going on, the pound sterling still rules in India, which is controlled by England, and when cotton is purchased there, the price is equivalent to 10 cents, with due allowance for inferior staple.

When the English can send a pound sterling to the United States and get our cotton upon the basis of 7 cents, they are not going to pay 10 cents for Indian cotton of an inferior spinning value and we can see real cause for alarm at Bombay.

Just as England is able to buy American cotton, at an advantage, because of our depreciated dollar so can other countries buy our cotton goods at a lower price, measured in their currency, than they can buy goods where the pound sterling or the French franc is the basis.

Already there are reports of large export sales and if the present situation continues, they will rapidly increase.

Such a situation as exists today can not long continue. We must reverse ourselves and return towards, if not to the gold standard, or else commodity prices must advance.

We are inclined to believe that commodity prices will eventually advance in proportion to the reduced value of the dollar.

Disseminating the Truth

Encouraged by the misleading statements of President Roosevelt, Secretary of Labor Perkins and Gen. Hugh Johnson relative to the existence of child labor in the textile industry, a drive was made in the spring and early summer for the ratification of the Federal Child Labor Amendment, which was submitted to the States in 1923, and several States were induced to ratify.

In order to counteract the movement the editor of this journal wrote a personal letter to the editor of every large newspaper in the United States, giving the facts and asking for fairness for the textile industry.

We also secured lists of the members of the legislatures which were in session and sent literature to them.

Presumably as the result of our effort, the trend towards ratification was checked and the Legislatures of both Kansas and Texas refused to ratify.

The effect of the letters which our editor sent to newspaper editors can be judged from the following letter which we received this week:

Jonesboro, Mo., Nov. 16, 1933.

Mr. David Clark,
Editor Textile Bulletin,
Charlotte, N. C.

Dear Sir:

I was glad to read in a recent issue of *Capper's Weekly* a letter from you in which you sought to correct the erroneous impression that people of these United States have in regard to child labor in the cotton mills of the Southland.

The writer is probably only one of thousands who have been led to believe that thousands of children of tender years were virtual slaves in the textile mills in your section of our country and that it took the cotton textile code to set them free.

Newspapers are greatly to blame for our mistaken ideas. Your letter to *Capper's* is most enlightening and I for one thank you for setting us straight as to real conditions and to know that for 12 years no child under 14 years of age had been legally employed in any cotton factory. I think this information should be broadcast in fairness to the textile industry of the South and be even imparted to Director Johnson of the NRA and made known to all agencies working to abolish child labor.

The writer fears we are far from a consistent nation. A week or so ago while visiting the City of St. Louis she noted (early Sunday morning) *very young lads* delivering the morning papers, and several years ago while in our Capital City of Jefferson noted not only boys but little girls at nightfall delivering papers.

Now, the writer does not believe in employment of young boys or girls in textile mills or any other kind of mills or factories, but is it worse than this sort of employment?

Textile mill work might injure and stunt them physically, but what about the injury physically, mentally and morally from selling papers all times of day and night? Hawking all about murders, suicides, scandals, etc.? Could anything be more harmful? And why should papers employ cheap young labor any more than the mills? "Consistency thou art a jewel."

Respectfully yours,

(MISS) EMMA GODFREY.

The Thirty-Hour Week

Those who now advocate an immediate thirty-hour work week overlook two important facts:

First, that business cannot pay as much for thirty hours of work as it does for the longer week, and continue to exist. If its wage costs go up, its prices must follow, but in that case, who will there be who can buy?

Second, a thirty-hour week without higher hourly wage is not sufficient to provide workers with the comforts to which they have been accustomed. If we are to have a universal thirty-hour week and a consequent lowering of the standard of living, there will be few who can buy more than the bare necessities of life. In that case, again, labor will find itself without jobs because most of its markets will have been destroyed.

A thirty-hour week may work some time in the future if the country can adjust itself to it gradually. To insist upon it now would be disastrous.—*Youngstown Vindicator*.

Ambassador to Russia

Add similes of the season: As disappointed as David Clark at not being named ambassador to Russia.—*Greensboro Daily News*.

Modern Machinery Is A Safe Investment

From time to time, we have pointed out that since the cotton mills began operations under their code, the matter of physical condition and efficient operation is more important than ever before.

Several very prominent manufacturers have recently expressed the same opinion. It is agreed that under limited hours and higher wages, the mills that are physically able to meet the test are the only ones that are going to be able to stay in the race. Under present conditions, it appears impossible for obsolete equipment to do a good competitive job.

A number of mills have recently completed plans for modernization of their plants. We know of others that realize they must take similar action. They are delaying at this time because they are apparently somewhat uncertain of the outlook for the industry.

It appears now that the mill that puts its funds in modern equipment is making the safest and most sensible investment for the future. Many mills have lost money from various investments, but we cannot recall that any mill can ever regretted money spent in improving his plant.

Market May Soon Turn Active

The quiet period of trading in the textile markets is apparently being extended because buyers, even where they actually need goods, are reluctant to cover further under present conditions. They lack confidence in the future trend of the market. At the same time, market sentiment is almost unanimous in believing that prices of goods and yarns are going higher. For one thing, it is generally believed that cotton prices are going to be forced higher, along with other commodity prices, by the Administration.

In spite of the dull markets for some time past, the mills are in a stronger technical position than they have been in for years. Otherwise there would have been no way of averting a very drastic decline in prices during the time when new business has been so slow.

From week to week, both manufacturers and distributors of cotton goods are becoming more and more in need of new supplies. They have been consistently postponing further buying. They not only need goods now, but are in a better position to buy them than they have been for a long time. We feel that the present lull may very easily give way to very active buying of a wide variety of goods.

MILL NEWS ITEMS

GREENVILLE, S. C.—A dividend of 1¾ per cent on 15,000 shares of preferred stock is being paid stockholders of the Brandon Mills Corporation.

This dividend, amounting to approximately \$27,000, will bring the total of dividends declared by the corporation since July 1st to about \$132,000.

BURLINGTON, N. C.—The Puritan Finishing Company of Burlington, which will manufacture and sell hosiery of all kinds, was chartered by Secretary of State Stacey W. Wade. The firm has authorized capital of \$100,000 with \$400 subscribed by F. R. Owen, D. M. Davidson, J. W. Burke, all of Gibsonville, and Dave DeMoss, of Burlington.

ROCKINGHAM, N. C.—The Steele's Mills, with 856 looms and 39,500 spindles, are operating on two shifts of 40 hours each per week, under the NRA. J. W. Jenkins, who was formerly superintendent of the Hannah Pickett Mills, has returned to Rockingham as superintendent of Steele's Mills, succeeding J. C. Montjoy, who had been with the mills for eight years.

GASTONIA, N. C.—Grady Gaston, secretary of the Chamber of Commerce, is corresponding with two weaving mills who state they wish to locate plants in this sec-

tion. One of these plants has 450 looms and the other a few less than that number. It is said that both are well established companies now operating plants in the East and that both desire to lease sufficient space to take care of their requirements.

ROCKINGHAM, N. C.—At a meeting here of the stockholders of the Pee Dee Manufacturing Company, George P. Tutwistle resigned as president and director and W. B. Cole resigned as director. Frank Dunlap, of Wadesboro, and Robert L. Cole were named as new board members. It is understood that another meeting will be held soon at which time a president will be elected. In the meantime Mr. Tutwistle will continue in charge as treasurer.

The stockholders also made plans for replacing the present equipment with modern machinery, from surplus funds said to be available for this purpose. A committee will report later on plans for modernization of the two plants.

LAURENS, S. C.—At the annual stockholders' meeting of the Laurens Cotton Mills, N. B. Dial, of Laurens and Washington, was re-elected as president; M. L. Smith, general manager and treasurer, and C. M. Burgess, assistant treasurer. Likewise, there were no changes in the personnel of the board of directors. Here for the meeting in addition to Mr. Dial were G. H. Milliken, H. A. Hatch and W. E. Winchester, of New York, and A. C. Todd, of Greenwood, all members of the official board.

The annual report of the treasurer was submitted, showing that the mill was operating full capacity as to employment and production. The visitors were shown through the textile plant and over the village.

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With the entire industry on an equal basis as regards hours and wages, with price cutting among suppliers practically eliminated, textile processors must look elsewhere for profits. Among other things extra or PLUS value in commodities and services purchased becomes increasingly important.

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MILL NEWS ITEMS

WALHALLA, S. C.—Construction of an addition to the Walhalla plant of the Victor-Monaghan Mill Company has been started, the project to cost approximately \$100,000. The addition will give employment to about 100 persons. Potter & Shackelford, of Greenville, are contractors for the addition. The plant is now operating 20,864 spindles and has 1,874 looms in place. The addition will increase the size of the plant and the facilities for manufacturing sheetings, prints, flannels, broadcloths and lawns.

KNOXVILLE, TENN.—According to a survey here this city's textile and clothing mills now are giving work to over 7,500 employees, the largest number on their payrolls since 1929. The total payrolls of these mills, under the textile and clothing mill codes, have increased approximately 25 per cent. Cherokee Spinning Company and Holston Manufacturing Company have about 1,000 between them. The Jefferson Woolen Mills in South Knoxville employs about 300. Hall-Tate Manufacturing Company has about 350. Textile and clothing mill employment now is about at the 1929 level.

The Appalachian Mills Company, with approximately 1,750 employed, leads all others. Then come Standard Knitting Mills, with approximately 1,500; Brookside Mills with about 1,700; Goodall Company, with approximately 750.

CHESTER, S. C.—Common and preferred stockholders of the Aragon-Baldwin Cotton Mills, at a special meeting here, considering the financial offer recently made by the Springs Cotton Mills for the Baldwin plant at Chester (the offer having been recommended by the directors at their special meeting here on October 31st), unanimously agreed to the sale as recommended by the directors, it was officially stated after the meeting. After the stockholders' meeting, the directors assembled and voted the Chester plant sold to the Springs Cotton Mills.

The Springs offer was not made public. It was stated that the transfer of the Chester plant to the Springs interests will be made around the first of December. This was left in charge of R. E. Henry, president of the Aragon-Baldwin.

The physical property involved in the sale embraced the machinery, real estate, and buildings of the Baldwin plant.

Rock Hill and Whitmire plants were not involved in the transaction. The Chester plant is now operating full eight-hour shifts day and night. William Gallon and Robert T. Stevens, of New York, representing the Stevens interests, attended the meeting. Baldwin has 876 looms and 31,488 spindles.

HIGH POINT, N. C.—Hosiery sales by Adams-Millis Corporation were larger in the third quarter this year than in the three months immediately preceding, and profits for the period are understood to have been slightly in excess of \$1 a share on the 156,000 common shares.

In the first three months this year earnings just covered the \$30,625 of dividends on the 17,500 shares of 7 per cent preferred stock, but in the second quarter they mounted rapidly, and for the six months were \$191,690, equal after preferred dividends to 84 cents a common share.

Third quarter earnings will probably bring net for the

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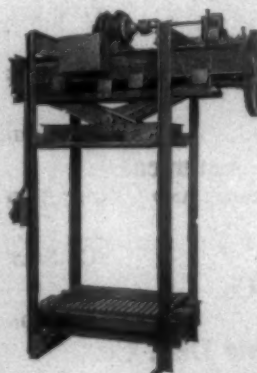
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MILL NEWS ITEMS

nine months up to around \$400,000, equal to close to \$2 a common share.

Restoration of earning power in the second quarter permitted resumption of common dividends after omission for one quarter. A dividend of 50 cents was paid in February, and on August 1st and November 1st, this year, quarterly dividends of 25 cents were paid, making the year's disbursements \$1 a common share.

The last quarter of 1933 will probably show smaller earnings than the third quarter. After the abnormally large purchases in the third quarter, some recession has taken place.

The company is in a good financial position. At the end of 1932 it held cash of \$324,946 and marketable securities and accrued interest of \$1,664,560. Against this were accounts payable of \$46,714 and a secured note payable of \$600,000. Cash reserves are now considerably larger. This liquid position has enabled the company to go long of raw materials at prices under current quotations.

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THE CHEMICAL HOUSE OF THE SOUTH

ASHEVILLE, N. C.—A sales organization is being perfected by the Western North Carolina Textile Company, Inc., to undertake national distribution of garments being manufactured by the plant here. The company began operations early in November.

STATESVILLE, N. C.—The plant of the Dillon-Vitt Company, manufacturers of underwear, was destroyed by fire last Sunday night.

GREENSBORO, N. C.—In Guilford County Superior Court a net counterclaim for \$715,403.32, after satisfying plaintiff's claim for \$593,125.98 for principal money advanced to the defendant mills, is contained in the answer filed by Norman A. Boren, receiver for Pomona Mills, Inc., defendant in the suit started October 2nd by Hunter Manufacturing and Commission Company.

The counterclaims are set out by the defendant. The first asks judgment for \$326,925.93, to be deducted from the amount claimed by the plaintiff, on account of alleged usurious interest charged on money advanced to the mills by the plaintiff and for the further sum of \$653,851.86, double the interest paid and collected, as a penalty. On the second counterclaim recovery of \$327,751.51, with interest, alleged to have been lost by the defendant in a mill transaction, is sought. It is alleged in the defendant's answer that the plaintiff prior to August 1, 1923, and continuously from that date to April 14, 1933, acted as factor and selling agent for Pomona Mills. From time to time the plaintiff made advances to the mills, the answer avers, and charged the mills \$326,925.93, alleged to have been usurious interest.

In support of the defendant's second counterclaim, the answer alleges, the plaintiff on March 31, 1920, sold to the Pomona Mills 1,700 shares of stock of the Lowe Manufacturing Company, which was adjudged bankrupt early this year. The stock was purchased after the plaintiff, holder of controlling stock in the Alabama company, had guaranteed the investment and agreed to protect the defendant mills against loss. The total cost of the stock to the defendant was \$185,418.16, the answer alleges, and interest thereon from date of purchase amounts to \$142,339.35, making a total of \$327,777.51, sought as recovery on defendant's second counterclaim.

"Loom-inary" Describes Success of Burlington Mills

In the current issue of the C. & K. Loom-inary," published by Crompton & Knowles Loom Works, a very interesting story of the growth of the Burlington Mills group, of which J. Spencer Love is president, is set forth. The Burlington group is defined as "a new power in textiles—probably the largest purchaser of new textile equipment in the world during the past four years."

Beginning in 1924, the publication says, Mr. Love and his associates, among whom are such well known figures as the Cones, of Greensboro, Col. Eugene Holt, W. J. Carter, M. B. Smith, William Klopman, T. H. Burkhardt and Dumont Bunker, gradually begun to acquire mill properties, until today Mr. Love has under his complete or partial control, nineteen units with a total of 4,326 looms.

High tribute is paid to Mr. Love and his associates by the C. & K. Company and the point is stressed that much of success in manufacturing is due to the fixed policy to scrap or sell old equipment and replace it with new.

Tensile Tests on Viscose Rayon

(Continued from Page 12)

cent and 100 per cent relative humidities; similarly with real silk (Denham and Lonsdale, loc. cit.), the extensibility is nearly doubled when the relative humidity is increased from 40 per cent to 100 per cent. With cellulose rayons the effect of humidity on the extensibility is complicated by other factors: sometimes the extensibility of the wet yarn is greater than that of the dry and at other times the contrary is the case. In general it can be stated that the wet extensibility is greater than the but when the cellulose has been degraded to a greater degree (fluidity > 15 , say), the dry extensibility is greater than the wet. From the foregoing it is obvious that it is impossible to state what will be the effect of humidity on the extensibility of a rayon unless other factors are known, of which the principal one is the degree of degradation of the cellulose. The effect of the degree of degradation on the wet extensibility of rayon yarns is very important when the utilization of these in fabric is considered. For example, in a warp-knitted fabric the low wet extensibility due to degradation of but one thread is enough to ruin a whole piece of fabric since the inability of this thread to extend under localized strains can result in that one degraded thread breaking from one end of the piece to the other. In woven fabrics, the harmful effect of an exceptionally degraded thread is less important, since it will only cause damage over a short length of the fabric if it is in the weft.

The effect of degradation in lowering the tensile qualities of rayon is much increased when the rayon is submitted to a mild alkaline scour, as stated earlier. This is most important, as it means that the low quality of a yarn may be discovered only after it is made up into fabric and has reached the stage of wet processing. Therefore it is an advantage, when fluidity measurements are not made, to test yarns not only wet and dry, but also after receiving a mild alkaline scour.

STANDARDS IN TESTING

The B.I.S.F.A. rules for the testing and standardization of rayons lay down the limits within which denier may vary, and the conditions of twist, humidity and temperature under which tensile tests should be carried out, but no specification is given of the limits within which the values of tensile tests should lie. In this respect B.I.S.F.A. is not exceptional, for there are no accepted standards available. As far as tensile strengths and elongations are concerned the values for commercial yarns given by King and Johnson (loc. cit.), and the degree of degradation of the cellulose in normal commercial yarns given by Ridge, Parsons and Corner ("J. Text. Inst." 22, T. 117, 1931), are useful guides by which a yarn may be judged. But these data can be no more than this since makers do not guarantee their yarns to have given values. Generally the yarns are sold on the understanding that they shall be of good tensile quality and capable of being formed into satisfactory fabrics. Thus, except in extreme cases, quantitative values are only useful in providing a basis for a personal opinion. One yarn may be said to have better qualities than another, but this does not prove that the inferior one is not of good quality or is not usable, although, if it can be shown that certain yarns in a delivery are much inferior to the average and if these yarns give trouble in processing, then the relative quantitative values of the tensile tests are valuable evidence.

The twist has an important bearing on the strength of staple fiber yarns, since the binding together of the individual fibers is dependent entirely on the twist. In a

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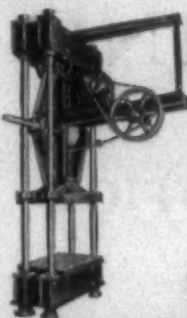
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singles cotton yarn the strength increases with the twist up to a maximum at a twist constant (multiplied by square root of cotton counts) of about 5, and thereafter diminishes again with still higher twists. The importance of the interlocking effect of the twist on the fibers in a staple yarn is also seen from the results of Clegg ("J. Text. Inst." 17, T. 591, 1926), who found that the strength of a cotton yarn is only about 50 per cent of the sum of the strengths of the constituent fibers and that about 50 per cent only of the hairs break, the remainder slipping. In staple fiber rayon yarns, a similar optimum twist must occur, but with normal continuous filament yarns twists up to 20 turns per in. have no effect on the strength or extensibility. At higher twists both the strength and extensibility diminish, the strength falling to about 50 per cent at 50 turns per in. and the extensibility falling by about 20 per cent (Hamm and Cleveland, Bur. of Stand. "J. of Res." 7, 617, 1931).—*Textile Manufacturer of England.*

Dyehouse Troubles*(Continued from Page 5)*

withstand a light bleaching or stripping with hydrosulfite, so the goods were then cleared up by either a light bleach or stripping. Either method produced very good results.

Often in bleaching stockings with a picot edge or anklets with colored yarns in the top, even though the colors are supposed to be bleaching fast, they may at times bleed slightly and have a tendency to stain the white. Usually the white can be cleared satisfactorily with a light strip at about 140 degrees containing a small amount of stabilized titanium sulfate and some sulfonated oil. Care should be taken not to let the bath be too strong or the clearing too long.

In package dyeing the use of refined salt is advantageous as the impurities have been removed and will not filter out on the outside of the package. The difference in cost between coarse mined salt and refined salt may appear quite an item but this cost is saved many times over in the time saved in washing sand and other impurities from the packages.

To avoid trouble in dyeing it is sometimes necessary to break rules or do what is supposed wrong. For instance, in dyeing a vat blue with Blue GCD best results are supposed to be obtained by reducing at 120° and dyeing at about the same temperature, but in dyeing rayon skein yarn this method will produce very uneven and streaky dyeing. A good blue that is very level can be produced as follows: start at 100 degrees and run for five minutes; lift the yarn and raise the temperature to 140 degrees and run another five minutes; lift again and raise the temperature to 200 degrees, add enough hydro to keep the bath in good condition and run for fifteen minutes; lift again and raise temperature again to 200 degrees, bring bath back to condition with sufficient hydrosulfite, run fifteen minutes more, and finish. This method, of course, requires a great deal more hydrosulfite on account of the high temperature breaking down the bath so rapidly. It has been said that dyeing by this method is not as fast as that produced at a lower temperature, but the goods are at least usable and saleable and none of the material has ever been returned and that is the dyer's main worry.

Water is a serious problem in every dyehouse. Most of the water supply in this section is drawn from muddy streams so that it has to be filtered, and care should be taken that no free alum is allowed to pass through to the settling basin. Enough alum should be used to insure a proper floc, and then the proper amount of soda ash used to take care of any free alum. The water when forming

a floc should have a pH of about 6.5 or just slightly acid, and then as it goes through the filter beds it should be treated with sufficient soda ash to prevent the water attacking the iron in pipes and boilers. I believe that ideal water for cotton dyeing and bleaching should contain no free alum or iron but be slightly alkaline to prevent rust from forming. Of course, if the water is hard it will be necessary to use a softening system, for without pure water there are bound to be many troubles.

In dyeing goods that are to be vulcanized, care, of course, is used to select colors that are copper and manganese free. It is here that care and cleanliness count in the preparation of the goods, for the allowances on copper, manganese and iron are so small that any carelessness can cause material to be rejected. Grey yarn in some cases may contain as high as .002 per cent of copper, or impure Glauber's salt may contain a small amount. Copper is rarely found, however, in common salt, and for this reason it is safer to use. In dyeing sulfur colors for this class of work it is well to avoid any metal tanks that may have a copper content, regardless of how small, as the risk is too great.

In some mills where a variety of different types of rayon are used, oftentimes a mixup will occur and it is desirable to have a reagent that will quickly determine the types of fiber in the material. Such a reagent has recently been made at Heidelberg, and it is now on the market under the name of Neocarmin W. Neocarmin W is very simple to use and will immediately identify any rayon or other fiber as each different fiber shows up a different color; for instance, cotton shows up a light blue, viscose a wine red, acetate a greenish yellow, cuprammonium a deep full blue.

Some mills do not have sufficient equipment, and the result is poor dyeing due to trying to cut corners and save enough time to get out an extra batch or two. Since the NRA code has been adopted there seems to be a greater tendency to speed up production than ever. If time is to be saved it should be in the loading and unloading of equipment and not in the actual dyeing or preparing time.

Specifications for Shrinkage of Woven Cottons

(Continued from Page 8)

Rule D—Woven cottons coming under Rule 3—Shrinkage, shall be legibly stamped with, or have firmly affixed thereto, a designation reading "Grade B Shrinkage."

Rule E—Woven cottons coming under Rule 4—Shrinkage, shall be legibly stamped with, or have firmly affixed thereto, a designation reading "Grade C Shrinkage."

Rule F—The term "Shrink-proof," "Full-shrunk," "Non-shrinkable" or the use of similar terms implying absolute conditions shall not be used but a term such as "Pre-shrunk" indicating that the cloth has undergone a pre-shrinking process may be used provided the material conforms with the requirements as enumerated under Rules 1, 2 or 3, and further provided that it is followed by the designation indicated in Rules B, C, or D, and further provided that it shall not appear in type larger than that used for the designation.

Rule G—The method hereinafter described shall be that contained in CCC-T-191 of the Federal Standard Stock Catalogue, Section IV, Part 5, of Federal Specifications for "Textiles; Test Methods" which method follows that of the American Association of Textile Chemists and Colorists, and the American Society of Testing Materials.

SUPERINTENDENTS AND OVERSEERS

We wish to obtain a complete list of the superintendents and overseers of every cotton mill in the South. Please fill in the enclosed blank and send it to us.

_____, 193____

Name of Mill _____

Town _____

_____, Spinning Spindles _____, Looms _____

_____, Superintendent _____

_____, Carder _____

_____, Spinner _____

_____, Weaver _____

_____, Cloth Room _____

_____, Dyer _____

_____, Master Mechanic _____

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AND 33rd
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**HOTEL
MARTINIQUE**



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11,250,851 Bales Of Cotton Ginned

Washington, Nov. 21.—Cotton of this year's crop ginned prior to November 14th was reported today by the Census Bureau to have totalled 11,250,851 running bales, counting

475,401 round bales as half bales, and including 3,318 bales of American-Egyptian.

To that date last year 10,533,684 bales, including 474,442 round bales and 5,073 bales of American-Egyptian had been ginned.

The crop this year has been forecast by the Department of Agriculture at 13,100,000 bales, as compared with 13,002,000 bales last year.

Ginnings to November 14th this year by States have been:

Alabama, 913,056 bales; Arizona, 43,998; Arkansas, 896,009; California, 99,514; Florida, 23,245; Geor-

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Charlotte, N. C.

Cincinnati, O.—Baltimore, Md.

Established 1904

gia, 1,043,072; Louisiana, 459,014; Mississippi, 1,073,328; Missouri, 174,229; New Mexico, 62,368; North Carolina, 622,974; Oklahoma, 1,039,926; South Carolina, 679,156; Tennessee, 346,768; Texas, 3,735,353; Virginia, 30,102; all other States, 8,744.

Short Work-Week Means College Education for Some

Ware Shoals, S. C.—Shorter hours of work in the many departments of the Ware Shoals Manufacturing Company, mean a college education for more than a dozen young people of the village. Approximately 15 girls and boys are taking advantage of reduced work time requirements to attend Erskine College at Due West, a few miles away. The company cooperates with them in arranging suitable working schedules.

PATENTS

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Prompt Deliveries
PHILADELPHIA
BELTING COMPANY
HIGH POINT, N. C.
E. J. Payne, Manager**

Address of President Cannon

(Continued from Page 4)

time rail or barge rates are reduced to the ports it makes cotton cost the Southern mills that much more. It is our understanding Major General T. Q. Ashburn, president of Inland Waterways Corporation, has agreed not to put into effect lower barge rates in the future, without giving the cotton trade 30 days' notice in which to establish their objections, if they have any. This has not been the case in the past. Incidentally I might state this fight cost private interests considerable money, in addition to expenses of our own traffic department.

Cheap barge and water rates have cost the Carolina and Southeastern mills a great deal of money, which has been made possible by the enormous sums of money spent by the Government on inland waterways and harbors, which have been paid entirely by Federal taxes, we having paid our proportionate part. We pay taxes year in and year out to this competition that cuts our throat. Serious consideration should be given by this Association, and by the other Southern manufacturers' associations, to sponsoring a concerted effort to have the Government levy tonnage taxes on inland waterways and harbors to pay for their up-keep. This would seem to be not only a propitious but an opportune time to institute such a move, as it is understood President Roosevelt, himself, is somewhat in favor of tonnage taxes for revenue to make inland waterways self sustained.

The Interstate Commerce Commission is now proposing to make a complete investigation of cotton freight rates. This investigation, like all other freight rate matters, is going to demand that the mills' interests be properly presented, otherwise we will be losers in the deal. This is going to cost money. I think our traffic department should be supplemented with enough money, to properly bear the expenses of these extra costs, that such things make imperative.

I am afraid that a great many of our mills that buy a good portion of their cotton locally, do not fully realize the importance of these freight rates to them. The Southeastern mills consume a great deal more cotton than is raised in their immediate territory, so much of their consumptive requirements must be secured from the Central or Western cotton belts, and the farther out in the belt such requirements can be secured by reason of reasonable freight rates, competition at our own doors will be lessened that much.

I wish to take this opportunity to sincerely thank Mr. Hunter Marshall, Jr., our efficient secretary, the members of all of our committees and others, for their hard work and splendid co-operation.

Exports Increase

Exports of cotton from the United States from August to October, inclusive, were 252,000 bales over the same period last year.

Exports this year amounted to 2,446,000 bales, valued at \$126,309,000, compared with 2,194,000 bales and \$89,613,000 for the same three months of 1932.

October exports amounted to 1,047,000 bales, valued at \$53,323,000, compared with 869,000 bales and \$45,131,000 for September and 1,008,000 bales valued at \$39,692,000 for October, 1932.

For the three months larger shipments were made to Japan, United Kingdom, France, Italy, Spain and Canada, whereas smaller shipments were made mainly to Germany, China, Belgium and the Netherlands.

Third Edition of PRACTICAL LOOM FIXING

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Dean of Textile School, N. C. State College

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COTTON GOODS

New York.—The cotton goods markets continued slow last week. The quiet trade is generally ascribed to lack of confidence in the financial situation. The feature of the situation was the strength of prices, which have not yielded to the slack trading. It is generally recognized that the cotton goods markets are in a very strong technical position. Potential demand is regarded as very strong and buyers who have consistently postponed further covering are expected to be in the market for new supplies within a short time. The markets, too, appear convinced that higher commodity prices, which means higher goods prices, are coming. Any new developments which increase confidence are expected to bring out new buying.

Trading in print cloths was generally limited to scattered sales, a few large orders being handled at the best prices of the month. Total sales were considerably lower than production. Mills on these goods continue to operate fully, but there is little fear of excess stocks due to the well sold condition of the mills for some time to come and the possibilities of further good business before the end of the year.

There was little change in the market for carded broadcloths. Prices held steady although the volume done was not large. In sheetings, the outlook was considered better though some sales at concessions were heard of. A number of users who have not been in the market are needing further supplies and are expected to take more goods soon.

The market for fine goods has not improved. On the standard constructions demand was slow and sales were mainly for filling-in purposes. Prices were steady but mills complain that they are very unsatisfactory. The announced intention of the mills on silk and rayon to stop production on the most popular weaves for two weeks in December is expected to have a very strengthening effect on the market.

Print cloths, 28-in., 64x60s	4½
Print cloths, 27-in., 64x60s	4½
Gray goods, 38½-in., 64x60s	6½
Gray goods, 39-in., 80x80s	9
Gray goods, 39-in., 68x72s	7½
Brown sheetings, 3-yard	9¼
Brown sheetings, 4-yard, 56x60s	8¼
Brown sheetings, standard	9½
Tickings, 8-ounce	20
Denims	15½
Dress gingham	15½
Standard prints	7¾
Staple gingham	9

J. P. STEVENS & CO., INC.

Selling Agents

40-46 LEONARD ST., NEW YORK

YARN MARKET

Philadelphia, Pa.—While a few dealers reported that yarn business was slightly better at the week-end, the market in general was very slow and total sales were small. Prices appeared fairly well stabilized at the level of a week ago. Buying interest was somewhat better but there were not enough consumers in the market to lend any new strength to the situation. Inquiry for carded yarns and for both single combed yarns was somewhat improved. Improvement in the sales methods of handling yarns is expected to grow out of the conferences recently held by the carded yarn spinners and yarn merchants. Sentiment for co-operative action in this respect is said to be much more promising than has ever been the case before.

While some yarns have been available at concessions, the amounts handled have not been large enough to effect the market. In general, spinners' prices were well maintained in spite of the fact that demand was lighter than it has been for a long while.

During the week spot supplies of yarn on hand here and in warehouses located at strategic points, controlled by market interests, were withdrawn from low-priced competition, pending improvement of demand. Direct-selling spinners, impressed and encouraged by the co-operation shown by an influential and representative group of yarn merchants, stabilized their carded yarn asking prices in the expectation that shortly they might find advantage under a supplemental code of fair competition applying directly to their business.

Fluctuations in cotton and reports of lighter holdings than a year ago are having no effect on yarn prices, in the opinion of dealers, who entertain no doubt that with the first flare of an indicated upturn in business, manufacturers will be giving the market full support although in perhaps a cautious manner.

Few buyers were tempted, in advance of orders for goods, by radically shaded yarn prices. Speculation seems for the time uninteresting.

Southern Single Warps		60s	59
10s	27	Duck Yarns, 3, 4 and 5-Ply	
12s	27 1/4	8s	28
14s	28	10s	29
16s	28 1/4	12s	30
20s	31	16s	31
26s	34	20s	32
30s	36		
Southern Two-Ply Chain Warps		Carpet Yarns	
8s	28	8s	28
10s	28 1/4	10s	29
12s	29	12s	30
14s	29	16s	31
16s	30	20s	32
20s	32		
24s	34	Carpet Yarns	
26s	35	Tinged carpets, 8s, 3	
30s	37 1/4	and 4-ply	25
36s	40	Colored strips, 8s, 3	
40s	42	and 4-ply	27 1/4
Southern Single Skeins		White carpets, 8s, 3	
8s	27	and 4-ply	27
10s	27		
12s	27 1/4	Part Waste Insulating Yarns	
14s	28	8s, 1-ply	23
16s	28 1/4	8s, 2, 3 and 4-ply	23
20s	31	10s, 2, 3 and 4-ply	24
26s	34	12s, 2-ply	25 1/4
30s	36	16s, 2-ply	28 1/4
36s	42	20s, 2-ply	30
40s	46	30s, 2-ply	36 1/4
Southern Two-Ply Skeins		36s, 2-ply	42 1/4
8s	27	Southern Frac Cones	
10s	28	8s	26 1/4
12s	28 1/4	10s	27
14s	29	12s	27 1/4
16s	29	14s	28
20s	30	16s	28 1/4
24s	32	18s	29
26s	34	20s	30
30s	36	22s	30 1/4
36s	42	24s	31 1/4-32
40s	47	26s	32
40s ex.	49	28s	34
50s	53	30s	36

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Southern Textile Bulletin

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Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in the TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts or materials, and believe this guide will prove of real value to our subscribers.

Adoff Bobbin Co., Kearny, N. J. Sou. Reps.: J. Alfred Lechler, 2107 E. 7th St., Charlotte, N. C.; L. S. Ligon, Greenville, S. C.

Akron Belting Co., Akron, O. Sou. Rep.: L. L. Haskins, Greenville, S. C.; L. F. Moore, Memphis, Tenn.

American Cyanamid & Chemical Corp., 535 Fifth Ave., New York City, Sou. Office and Warehouse: 301 E. 7th St., Charlotte, N. C.; Paul Haddock, Sou. Mgr.

American Enka Corp., 271 Church St., New York City, Sou. Rep.: H. J. Mebane, Asheville, N. C.

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Ashworth Bros., Inc., Charlotte, N. C. Sou. Offices: 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S. W., Atlanta, Ga.; Texas Rep.: Textile Supply Co., Dallas, Tex.

Barber-Colman Co., Rockford, Ill. Sou. Office: 31 W. McBee Ave., Greenville, S. C.; J. H. Spencer, Mgr.

Barkley Machine Works, Gastonia, N. C. Chas. A. Barkley, president.

The Belger Co., Watertown, Mass. Rep. for North and South Carolina, William Lee, Box 785, Charlotte, N. C.

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Butterworth & Sons Co., H. W., Philadelphia, Pa. Sou. Office: Johnston Bldg., Charlotte, N. C.; J. Hill Zahn, Mgr.

Campbell & Co., John, 75 Hudson St., New York City, Sou. Reps.: M. L. Kirby, P. O. Box 432, West Point, Ga.; Mike A. Stough, P. O. Box 701, Charlotte, N. C.; A. Max Browning, Hillsboro, N. C.

Carolina Steel & Iron Co., Greensboro, N. C.

Charlotte Chemical Laboratories, Inc., Charlotte, N. C. A. Mangum Webb, Sec.-Treas.

Chicago Rawhide Mfg. Co., 1267-1301 Elston Ave., Chicago, Ill. Sou. Rep.: J. C. Duckworth, Greenville, S. C.

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Clinton Co., Clinton, Iowa, Sou. Headquarters, Clinton Sales Co., Inc., Greenville, S. C.; E. R. Miller, Sou. Agt. Sou. Reps.: Luther Knowles, Sr., Hotel Charlotte, Charlotte, N. C.; Luther Knowles, Jr., 223 Springs St., S. W., P. O. Box 466, Atlanta, Ga. Stocks carried at convenient points.

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Eaton, Paul B., 218 Johnston Bldg., Charlotte, N. C.

Eclipse Textile Devices, Elmira, N. Y. Sou. Reps.: Eclipse Textile Devices Co., care Pelham Mills, Pelham, S. C.; Eclipse Textile Devices Co., care Bladenboro Cotton Co., Bladenboro, N. C.

Emmons Loom Harness Co., Lawrence, Mass. Sou. Rep.: George F. Bahan, P. O. Box 581, Charlotte, N. C.

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Gastonia Brush Co., Gastonia, N. C. C. E. Honeycutt, Mgr.

General Dyestuff Corp., 230 Fifth Ave., New York City, Sou. Office and Warehouse, 1101 S. Blvd., Charlotte, N. C.; B. A. Stigen, Mgr.

General Electric Co., Schenectady, N. Y. Sou. Sales Offices and Warehouses: Atlanta, Ga., E. H. Ginn, Dist. Mgr.; Charleston, W. Va., W. L. Alston, Mgr.; Charlotte, N. C., E. P. Coles, Mgr.; Dallas, Tex., L. T. Blaisdell, Dist. Mgr.; Houston, Tex., E. M. Wise, W. O'Hara, Mgrs.; Oklahoma City, Okla., F. B. Hathway, B. F. Dunlap, Mgrs. Sou. Sales Offices: Birmingham, Ala., R. T. Brooks, Mgr.; Chattanooga, Tenn., W. O. McKinney, Mgr.; Ft. Worth, Tex., A. H. Keen, Mgr.; Knoxville, Tenn., A. B. Cox, Mgr.; Louisville, Ky., E. B. Myrick, Mgr.; Memphis, Tenn., G. O. McFarlane, Mgr.; Nashville, Tenn., J. E. Barksdale, Mgr.; New Orleans, La., E. Willard, Mgr.; Richmond, Va., J. W. Hicklin, Mgr.; San Antonio, Tex., I. A. Uhr, Mgr.; Sou. Service Shops, Atlanta, Ga., W. J. Selbert, Mgr.; Dallas, Tex., W. F. Kaston, Mgr.; Houston, Tex., F. C. Bunker, Mgr.

General Electric Vapor Lamp Co., Zionsboro, N. J. Sou. Reps.: Frank E. Keener,

187 Spring St., N. W., Atlanta, Ga.; C. N. Knapp, Commercial Bank Bldg., Charlotte, N. C.

Goodyear Tire & Rubber Co., Inc., The, Akron, O. Sou. Reps.: W. C. Killick, 205-207 E. 7th St., Charlotte, N. C.; P. B. Eckels, 141 N. Myrtle Ave., Jacksonville, Fla.; Boyd Arthur, 713-715 Linden Ave.,

Memphis, Tenn.; T. F. Stringer, 500-6 N. Carrollton Ave., New Orleans, La.; E. M. Champion, 709-11 Spring St., Shreveport, La.; Paul Stevens, 1609-11 First Ave., N. Birmingham, Ala.; B. S. Parker, Jr., Cor. W. Jackson and Oak Sts., Knoxville, Tenn.; E. W. Sanders, 209 E. Broadway, Louisville, Ky.; H. R. Zierach, 1225-31 W. Broad St., Richmond, Va.; J. C. Frye, 191-199 Marietta St., Atlanta, Ga.

Hart Products Corp., 1440 Broadway, New York City, Sou. Reps.: Samuel Lehrer, Box 265, Spartanburg, S. C.; W. G. Shull, Box 923, Greenville, S. C.; O. T. Daniel, Textile Supply Co., 30 N. Market St., Dallas, Tex.

H & B American Machine Co., Pawtucket, R. I. Sou. Office: 815 The Citizens and Southern National Bank Bldg., Atlanta, Ga.; J. C. Martin, Agent, Rockingham, N. C.; Fred Dickinson.

Hermas Machine Co., Hawthorne, N. J. Sou. Rep.: Carolina Specialty Co., P. O. Box 520, Charlotte, N. C.

Houghton & Co., E. F., 240 W. Somerset St., Philadelphia, Pa. Sou. Sales Mgr., H. J. Waldron, 514 First National Bank Bldg., Charlotte, N. C. Sou. Reps.: J. A. Brittain, 722 S. 27th Place, Birmingham, Ala.; Porter H. Brown, P. O. Box 656, Chattanooga, Tenn.; G. F. Davis, 418 N. Third St., St. Louis, Mo., for New Orleans, La.; J. M. Keith, P. O. Box 663, Greensboro, N. C.; R. J. Maxwell, 525 Rhodes Haverly Bldg., Atlanta, Ga.; D. O. Wylie, 514 First National Bank Bldg., Charlotte, N. C.

Howard Bros. Mfg. Co., Worcester, Mass. Sou. Office and Plant: 244 Forsyth St., S. W., Atlanta, Ga. Guy L. Melchoir, Mgr. Sou. Reps.: E. M. Terryberry, 208 Embassy Apts., 1613 Harvard St., Washington, D. C.; Guy L. Melchoir, Jr., Atlanta Office.

Hygrolit, Inc., Kearny, N. J. Sou. Reps.: J. Alfred Lechler, 2107 E. 7th St., Charlotte, N. C.; Belton C. Plowden, Griffin, Ga.; L. S. Ligon, Greenville, S. C.

Jacobs Mfg. Co., E. M., Danielson, Conn. Sou. Rep.: W. Irving Bullard, treasurer, Charlotte, N. C. Mgr. Sou. Service Dept.: S. B. Henderson, Greer, S. C.; Sou. Distributors: Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., and Charlotte Supply Co., Charlotte, N. C.; Gastonia Mill Supply Co., Gastonia, N. C.; Shelby Supply Co., Shelby, N. C.; Montgomery & Crawford, Spartanburg, S. C.; Industrial Supply Co., Clinton, S. C.; Carolina Supply Co., Greenville, S. C.; Southern Belting Co., Atlanta, Ga.; Greenville Textile Mill Supply Co., Greenville, S. C., and Atlanta, Ga.; Young & Vann Supply Co., Birmingham, Ala.; Waters-Garland Co., Louisville, Ky.

Johnson, Chas. B., Paterson, N. J. Sou. Rep.: Carolina Specialty Co., Charlotte, N. C.

Keever Starch Co., Columbus, O. Sou. Office: 1200 Woodside Bldg., Greenville, S. C.; Daniel H. Wallace, Sou. Agent, Sou. Warehouses: Greenville, S. C., Charlotte, N. C., Burlington, N. C. Sou. Rep.: Claude B. Iler, P. O. Box 1383, Greenville, S. C.; Luke J. Castle, 1151 Dartmouth Place, Charlotte, N. C.; F. M. Wallace, 2027 Morris Ave., Birmingham, Ala.

Lockwood Greene Engineers, Inc., 100 E. 42nd St., New York City, Sou. Office: Montgomery Bldg., Spartanburg, S. C.; R. E. Barnwell, Vice-Pres.

Logemann Bros. Co., Milwaukee, Wis. Sou. Reps.: Fred P. Brooks, P. O. Box 941, Atlanta, Ga., and A. L. Taylor, Oxford, N. C.

Marston Co., John P., 247 Atlantic Ave., Boston, Mass. Sou. Rep.: Frank G. North, Inc., P. O. Box 544, Atlanta, Ga.

Manhattan Rubber Mfg. Div. of Raybestos-Manhattan, Inc., Passaic, N. J. Sou. Offices and Reps.: The Manhattan Rubber Mfg. Div., 1108 N. Fifth Ave., Birmingham, Ala.; Alabama—Anniston, Anniston Hdw. Co.; Birmingham, Crandall Eng. Co. (Special Agent); Birmingham, Long-Lewis Hdw. Co.; Gadsden, Gadsden Hdw. Co.; Huntsville, Noofin Hdw. & Supply Co.; Tuscaloosa, Allen & Jemison Co.; Montgomery, Teague Hdw. Co. Florida—Jacksonville, The Cameron & Barkley Co.; Miami, The Cameron & Barkley Co.; Tampa, The Cameron & Barkley Co.; Georgia—Atlanta, Amer. Machinery Co.; Columbus, A. H. Watson (Special Agent); Macon, Hibb Supply Co.; Savannah, D. DeTreville (Special Agent); Kentucky—Ashland, Ben Williamson & Co.; Harlan, Kentucky Mine Supply Co.; Louisville,

Graft-Pelle Co. North Carolina—Charlotte, Matthews-Morse Sales Co.; Charlotte Supply Co.; Fayetteville, Hanks Hardware House; Gastonia, Gastonia Belting Co.; Goldsboro, Dewey Bros.; High Point, Beeson Hdw. Co.; Lenoir, Bernhardt-Seagle Co.; Wilmington, Wilmington Iron Works; Winston-Salem, Kester Machinery Co. South Carolina—Anderson, Sullivan Hdw. Co.; Charleston, The Cameron & Barkley Co.; Clinton, Industrial Supply Co.; Columbia, Columbia Supply Co.; Greenville, Sullivan Hdw. Co.;

Du Pont de Nemours & Co., E. I., Wilmington, Del. Sou. Office, 302 W. First St., Charlotte, N. C.; John L. Dabbs, Mgr. Sou. Warehouses: 302 W. First St., Charlotte, Buford Bros., Inc. Service Rep.; J. P. Carter, 62 North Main St., Greer, S. C. (Phone 186). Salesmen: E. H. Olney, 101 Gertrude St., Alta Vista Apts., Knoxville, Tenn.; C. P. Shook, Jr., 1931 North 20th St., Birmingham, Ala.; B. C. Nabers, 2519 27th Place South, Birmingham, Ala.

Mauney Steel Co., 237 Chestnut St., Philadelphia, Pa. Sou. Reps.: Aubrey Mauney, Burlington, N. C.; Don L. Hurlbert, 511 James Bldg., Chattanooga, Tenn.

National Aniline & Chemical Co., Inc., 40 Rector St., New York City, Sou. Office and Warehouse: 201 W. First St., Charlotte, N. C.; Julian T. Chase, Mgr. Sou. Reps.: Dyer S. Moss, A. R. Akerstrom, W. L. Barker, C. E. Blakely, Charlotte Office; James I. White, American Savgs. Bk. Bldg., Atlanta, Ga.; H. A. Rodgers, 910 James Bldg., Chattanooga, Tenn.; J. E. Shuford, Jefferson St. Life Bldg., Greensboro, N. C.; E. L. Pemberton, 342 Dick St., Fayetteville, N. C.

National Oil Products Co., Harrison, N. J. Sou. Reps.: R. B. MacIntyre, Hotel Charlotte, Charlotte, N. C.; G. H. Small, 310 Sixth St., N. E., Atlanta, Ga. Warehouse, Chattanooga, Tenn.

National Ring Traveler Co., 257 W. Exchange St., Providence, R. I. Sou. Office and Warehouse: 131 W. First St., Charlotte, N. C. Sou. Agt., C. D. Taylor, Gaffney, S. C. Sou. Reps.: L. E. Taylor, Box 272, Atlanta, Ga.; Otto Pratt, Gaffney, S. C.; H. L. Lanier, Shawmut, Ala.

Neumann & Co., R., Hoboken, N. J. Direct Factory Rep.; Pearce Slaughter Belting Co., Greenville, S. C.

N. Y. & N. J. Lubricant Co., 292 Madison Ave., New York City, Sou. Office: 601 Kingston Ave., Charlotte, N. C.; Lewis W. Thomason, Sou. Dist. Mgr. Sou. Warehouses: Charlotte, N. C.; Spartanburg, S. C.; New Orleans, La.; Atlanta, Ga.; Greenville, S. C.

Onyx Oil & Chemical Co., Jersey City, N. J. Sou. Rep.: Edwin W. Klumph, 1716 Garden Terrace, Charlotte, N. C.

Perkins & Son, Inc., B. F., Holyoke, Mass.

Philadelphia Belting Co., High Point, N. C.; E. J. Payne, Mgr.

Rhoads & Sons, J. E., 35 N. Sixth St., Philadelphia, Pa. Factory and Tannery, Wilmington, Del.; Atlanta Store, C. R. Mitchell, Mgr.

Robinson & Son Co., Wm. C., Dock and Caroline Sts., Baltimore, Md. Sou. Office: Charlotte, N. C.; B. D. Heath, Mgr. Reps.: Ben F. Houston, Charlotte, N. C.; Fred W. Smith, Charlotte, N. C.; C. M. Greene, 1101 W. Market St., Greensboro, N. C.; H. J. Gregory, Charlotte, N. C.

Saco-Lowell Shops, 147 Milk St., Boston, Mass. Sou. Office and Repair Depot: Charlotte, N. C.; Walter W. Gayle, Sou. Agent; Branch Sou. Offices: Atlanta, Ga.; John L. Graves, Mgr.; Greenville, S. C.

Seydel-Woolley Co., 748 Rice St., N. W., Atlanta, Ga.

Sipp-Eastwood Corp., Paterson, N. J. Sou. Rep.: Carolina Specialty Co., Charlotte, N. C.

Sirrine & Co., J. E., Greenville, S. C. Sonoco Products Co., Hartsville, S. C. Southern Spindle & Flyer Co., Charlotte, N. C.

Stanley Works, The, New Britain, Conn. Sou. Office and Warehouse: 552 Murphy Ave., S. W., Atlanta, Ga.; H. C. Jones, Mgr.; Sou. Reps.: Horace E. Black, P. O. Box 424, Charlotte, N. C.

Steel Heddle Mfg. Co., 2100 W. Allegheny Ave., Philadelphia, Pa. Sou. Office and Plant: 621 E. McBee Ave., Greenville, S. C.; H. E. Littlejohn, Mgr. Sou. Reps.: W. O. Jones and C. W. Cain, Greenville Office.

Stein, Hall & Co., Inc., 285 Madison Ave., New York City, Sou. Office: Johnston Bldg., Charlotte, N. C.; Ira L. Griffin, Mgr.

Stewart Iron Works, Cincinnati, O. Sales Reps.: Jasper C. Hutto, 111 Latta Arcade, Charlotte, N. C.; Peterson-Stew-

art Fence Construction Co., 241 Liberty St., Spartanburg, S. C.

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Terrell Machine Co., Charlotte, N. C.; E. A. Terrell, Pres. and Mgr.

Textile-Finishing Machinery Co., The, Providence, R. I. Sou. Office: 909 Johnston Bldg., Charlotte, N. C.; H. G. Mayer, Mgr.

U S Bobbin & Shuttle Co., Manchester, N. H. Sou. Plants: Monticello, Ga. (Jordan Div.); Greenville, S. C.; Johnson City, Tenn. Sou. Reps.: L. K. Jordan, Sales Mgr., Monticello, Ga.

Universal Winding Co., Providence, R. I. Sou. Offices: Charlotte, N. C.; Atlanta, Ga.

U. S. Ring Traveler Co., 159 Aborn St., Providence, R. I. Sou. Reps.: William W. Vaughan, P. O. Box 792, Greenville, S. C.; Oliver B. Land, P. O. Box 158, Athens, Ga.

Veeder-Root Co., Inc., Hartford, Conn. Sou. Office: Room 1401 Woodside Bldg., Greenville, S. C.; Edwin Howard, Sou. Sales Mgr.

Victor Ring Traveler Co., Providence, R. I. Sou. Offices and Warehouses: 137 S. Marietta St., Gastonia, N. C.; J. McD. McLeod, 520 Angier Ave., N. E., Atlanta, Ga.; B. F. Barnes, Mgr. Sou. Reps.: B. F. Barnes, Jr., Atlanta Office; N. H. Thomas, Gastonia Office.

Viscose Co., Johnston Bldg., Charlotte, N. C.; Harry L. Dalton, Mgr.

WAK, Inc., Charlotte, N. C. W. A. Kennedy, Pres.; F. W. Warrington, field manager.

Whitin Machine Works, Whitinsville, Mass. Sou. Offices: Whitin Bldg., Charlotte, N. C.; W. H. Porcher and R. I. Dalton, Mgrs.; 1317 Healey Bldg., Atlanta, Ga. Sou. Reps.: M. P. Thomas, Charlotte Office; L. D. Wingo and M. J. Bentley, Atlanta Office.

Whitinsville Spinning Ring Co., Whitinsville, Mass. Sou. Rep.: Webb Durham, 2025 East Fifth St., Charlotte, N. C.

Whitney Mfg. Co., Hartford, Conn. Sou. Rep.: Precision Gear & Machine Co., Charlotte, N. C.

Wolf, Jacques & Co., Passaic, N. J. Sou. Reps.: C. R. Bruning, 1202 W. Market St., Greensboro, N. C.; Walter A. Wood Supply Co., 4517 Rosville Blvd., Chattanooga, Tenn.

Soviet Russia

The 1933 Russian cotton textile plan provided for a total production of 3,007,000,000 yards of finished fabrics as compared with the planned output of 3,347,500,000 yards for 1932, and the actual production of approximately 2,624,600,000 yards. On the basis of present information on developments in the industry, full execution of the 1933 plan does not seem probable. Furthermore, unless the Government should import raw cotton from abroad, the plan for 1934 production will probably not differ greatly from that for 1933, i.e., 3,007,400,000 yards.

In attaining independence of foreign cotton supplies Russia has accomplished much in the way of expanding production, but at the same time she appears to have reached a point beyond which further expansion is difficult at this time, and no material exports of Russian cotton are to be expected during the next few years. Russia's independence of foreign sources, however, seems to be assured for 1933-34, assuming that no effort is to be made to increase

materially the output of cotton manufactures. If such an increase should be undertaken, it would doubtless be necessary to increase cotton imports, especially of American cotton, in view of the fact that the 1933 domestic crop is not likely to exceed that of 1932.

Tire Fabric Makers Granted Extension

Washington. — Presidential extension until November 20th of the stay exempting tire fabric manufacturers from the machine hour limitations of the cotton textile code was announced at the National Recovery Administration.

The President originally granted the exemption when the cotton textile code was approved and under an executive order, dated November 6th, it was to have ended November 13th.

Manufacturers who have been operating three 40-hour shifts a week, asked for one more week in which to adjust themselves to the limit of two 40-hour shifts a week.

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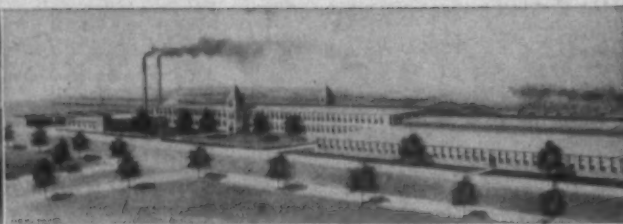
Rate does not include cost of Pullman or meals on train, nor expenses in New York. Government taxes additional.

Railroad tickets valid November 28th and 29th to New York, bearing final return limit December 7th, 1933.

Columbus sails from New York 11:59 P. M. November 29th, and returns to New York December 4th, 1933, A. M.

For additional information, reservations and literature, address:

R. H. GRAHAM,
Division Passenger Agent,
Charlotte, N. C.
Southern Railway System



VISITING THE MILLS

Edited by Mrs. Ethel Thomas Dabbs

ROCK HILL, S. C.

INDUSTRIAL COTTON MILL—TEN NEW CARDS AND SEVENTY-ONE NEW SPINNING FRAMES DISCARDED.
NEW POWER HOUSE FOR HOME OWNED POWER.

It is always a pleasure to call on these people where friendliness and hospitality are watchwords. The genial president and treasurer, L. D. Pitts, and Superintendent J. A. Wooten believe in progress and are eternally vigilant in the fight against property deterioration. A new roof has been put on the mill and floors repaired. The village houses have recently been overhauled and nicely repainted.

A new boiler, filtering plant and a new power house for home manufactured power are some of the improvements.

When all the 121 cards and all 119 spinning frames are in operation, then it will be possible to run the 1,000 looms and give work to many more people.

Sanforized denims are made here; in other words, denims are "shrunk" and when mother makes overalls for "John and Jim," they stay the right size after being laundered, and "little Bud" doesn't have to take hand-me-downs.

GARDENS, FLOWERS, COWS AND HOGS

The operatives here love their homes, tend gardens and plant flowers. Many of them have cows and raise their own meat, and laugh at hard times.

Miss Annie Smith, timekeeper and general assistant, made out her first payroll in 1902, when just out of school. She fell in love with her job instead of a man, bought and paid for her own home, and is her own boss. She likes to lend a helping hand to those in need and is one of the most loved women in the community.

T. B. Jackson, office man, has a wee baby girl at his home.

J. D. Pitts, son of the president and treasurer, and Miss Celeste Williams are among the recent newly married couples.

C. M. Pitts, another young son of the president, is the supply clerk, and a very courteous and obliging young man.

OVERSEERS, SECOND HANDS AND OTHERS WHO HOPE TO BE

We are very proud of our nice list of readers here. Starting in the cloth room, W. E. Hartsell, overseer; Vera Neal, Bertha Lee, M. W. Furr, Wm. T. Paul and R. D. Shugart are among our friends.

D. E. Mehaffey is overseer of carding; W. M. Hovis,

S. T. Enloe and C. A. Smith, second hands; H. C. McCammon and C. C. Trull, card grinders; Wm. Gaynor, spare fixer, and working up.

T. F. Starnes is overseer spinning; T. W. West, second hand; L. E. Crowder and W. M. Love, section men; W. B. Carnell, oiler and bander.

J. T. Frye, overseer weaving, beaming and slashing, has always taken our paper, and was so afraid he'd miss a copy that when his subscription expired he went all the way to Charlotte to renew it in person! There are a lot of progressive young men in the weave room. G. R. Neal and E. O. Huffman are second hands in weaving; F. A. Baker in beaming and D. E. Marthers in slashing; C. J. Rikard, J. A. Kiker, C. H. Graham, B. M. Gregory, R. P. Sutton and J. F. Stewart are loom fixers; W. F. Starnes is head loom fixer.

Floyd Pittman, S. T. Robinson, T. F. Baker and G. W. Faulkenberry are weavers who like to read and keep posted; D. A. Morris and J. B. Garrison are tying-in men.

S. L. Lineberger is master mechanic; Lexie Poole is machinist.

G. W. Paxton is in charge of dyeing. Has been dyeing a long time and isn't dead yet! The splendid fast color for which these sanforized denims is noted is due to his efficient methods that insure satisfaction.

CHESNEE, S. C.

CHESNEE COTTON MILLS.

This is a branch of Saxon Mills of Spartanburg, and since the death of Superintendent Macomson of Saxon, J. L. Jewell of Chesnee has superintended both plants, which are only about 16 miles apart.

Chesnee is one among the prettiest of mills with very attractive lawns and well kept evergreen hedges, lots of ever blooming roses and other flowers in season.

The people are interested in education, church work and community life, and are loyal and dependable operatives.

Basketball clubs for both sexes have recently been organized. The Girls Club gave a very enjoyable oyster supper a few evenings ago for the benefit of their club.

The product of this mill has been changed from broadcloth to print cloth and one-process drawing has been installed, along with other improvements.

OVERSEERS, SECOND HANDS AND OTHERS

J. R. Kilpatrick, overseer carding; W. H. Revels, second hand, and Carl Martin, section man, are three live wires.

J. S. Wilson is overseer spinning; C. W. Quinn, second

hand. Mr. Wilson is a deep thinker and an interesting conversationalist.

W. C. Trammell is overseer weaving; G. M. Maner and C. W. Trautham, second hands.

Roy Howell, overseer the cloth room, and Sam Prince, master mechanic.

A colored employee (probably a sweeper) received his pay envelope at Overseer Wilson's desk and his low bow and smiling "Thanky" attested his appreciation—not only for the money, but for the job, which made it possible for him to draw a ticket.

FINGERVILLE, S. C.

Fingerville is one of the oldest textile towns in the State and will be entitled to celebrate her hundredth anniversary in 1939. This picturesque mill and village nestles in the valley and on the hills ten or twelve miles west of Chesnee.

The property is owned by Northern capitalists who never come about it, but leave local officials alone to run the business. A. W. Young, superintendent, says he wishes the Northern owners would come down and live at Fingerville awhile—get acquainted with their property and people.

Some of the houses built 94 years ago are still standing. Some of the machinery is very old, but has been well cared for and is going nicely. We have a tender feeling for this mill which has never thrown old employees out of work in favor of automatic machinery.

F. G. Lawing is carder and spinner; R. A. Calbert, finisher; J. W. Bell, master mechanic; F. B. Porter, night carder and spinner.

We had the good luck to meet the big fat jolly agent, Mr. H. W. Kirby, and liked him very much.

He is also president and treasurer of Cowpens Mill, at Cowpens, S. C.

GREER, S. C.

GREER PLANT—VICTOR-MONOGHAN MILLS.

Here it is, Saturday, the 18th, when we had expected to be banqueting with the Improvement Club of Victor Mill, but Mr. M. R. Casey, chairman of entertainment, wrote us that the big event had been postponed until the 25th, and it will be almost impossible for us to attend on that date.

This annual event is one of the year's biggest and most enjoyable events for the members, which are the superintendent, overseers, second hands and section men, who generally put on surprising stunts, as well as "put in" an amazing lot of eats.

However, if we don't have the pleasure of attending, we hope to receive a full report of the affair from the facile pen of that versatile and well known writer, Mr. M. R. Casey. He is a mighty busy man, but those are the kind who do things. Never ask a man of leisure for a favor—he is always too busy doing nothing to come across.

We recently had quite an enjoyable visit to this nice place, where our oldest son, C. V. Thomas, has a position which he says he wouldn't swap for Roosevelt's!

We picked up several new and renewal subscriptions: M. R. Casey, heading the list; then came M. E. Christopher, designer; J. R. Lowe, warp man; J. W. Suttle, section man; W. B. Shannon, overseer weaving; L. J. Davidson and B. A. Burdett, second hands; A. C. Elmore,

master mechanic, and V. D. Smith, shop man. Lots of others here read our paper.

Superintendent F. L. Still is one of the liveliest and most progressive young men in the textile industry. His biggest "boss" is a wee baby daughter—the only one in the Still family of father and three sons.

HUNTSVILLE, ALA.

LINCOLN MILLS OF ALA.

Professor Edward Anderson, the principal of the Lincoln School, is doing a mighty piece of work; the school will soon be an accredited High School. We all think well of Professor Anderson and wish he had come to us sooner.

Here are the High School teachers and the subjects they teach: Edward Anderson, English-Mathematics; Clark Grant, Science, History; Miss Catherine Walker, Home Economics, English; Mrs. Neil Wood, Math-Science.

In the grammar school, Mr. J. W. Taylor has the sixth grade; Mrs. J. D. Pitman and Mrs. Grady Maple, the fifth; Mrs. Ora Wikle and Mrs. Clyde Campbell, the fourth; Miss Virginia Mosley and Miss Lillian Blackburn, the third; Miss Stella Sibley and Miss Letie Sue Whittaker, the second; Miss Bertie McLain and Miss Rebecca Larkin, the first; Miss Elizabeth Davenport has charge of music. This school has 590 enrollment with 97.6 per cent for September and October in attendance.

The spirit of ball has not died in Lincoln, as there soon will be a basketball team; we will give the line-up later. Probably Mr. Grant will be the coach and also a player. We hope to see Dick Covington on this team; he holds the world's championship on a hundred-yard dash.

G. B. R.

IVA, S. C.

JACKSON MILLS.

Jackson Mills, at Iva, where J. J. Jordan has been superintendent since 1911, is a really attractive place. The mill is up-to-date; nice machinery, too. The carding and spinning has been, or is being, overhauled, and 100 looms have recently been added to the equipment. A temporary wooden addition for more cards has been built, and the mill is being repainted inside and out.

Jackson ball club won the Dixie League Championship and celebrated with a big banquet at Pruett House.

Most of the overseers have been here for quite awhile, which proves that the management is pleasant and congenial. It would be hard to find a more pleasant gentleman than Anderson.

M. E. Harvell is overseer carding; J. H. Ellis, overseer spinning; A. B. Davis, overseer weaving; J. B. Reeves, overseer cloth room; J. A. Kirkpatrick, master mechanic.

"Mill Vote"

Following editorial comment of The Yorkville Enquirer is relative to one feature of the voting on the prohibition referendum, that so far, has not been touched upon editorially by other papers of this State: "In most of the counties where there was a large 'mill vote,' it went against repeal—notably Spartanburg, Greenville, Anderson, Cherokee, York, Newberry, Lancaster, Union."

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Job Lots, in Piece Goods, Hosiery,
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knitting machines, fully conversant
with their mechanical details, capable
of assembling, adjusting, maintaining,
operating them on rayon and supervising
knitting department. Also must be
capable of handling knitting complaints
and assisting customers in solving their
troubles in the knitting of rayon. Suc-
cessful applicant will have to reside in
South. Please do not answer unless
fully qualified as per above. State age,
technical education, previous positions
and experience, salaries received,
whether married or single, and enclose
photograph. A. C. E., care Textile Bul-
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Warning To Labor

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far where some labor trouble is going
on, mostly among the mills in South
Carolina.

Now, Mr. Editor, I am a mill boy
and have been for some twenty-five
years and I am just as proud of it as
the man who walks the streets worth
a million and I would not say or do
anything that would hurt these good
people in any way in their future
happiness. We all know that the
textile industry has been through a
bad storm for the past four or five
years, as well as their employees.
The mills have gradually improved
for the last fifteen or twenty years
from the once small industry to one
of the greatest in the United States
and were the first to submit a code
to the government, let's say the best
and fairest and squarest deal the
mill employees ever had and I believe
the mill owners were glad to do this
for us.

There have been some of the best
mills in the South torn to pieces just
on account of uncalled for labor trou-
ble. I can name mills if you wish
where before these red devils from
the North came down here, gave
their help many advantages, helping
them both socially and financially.
They are far apart now and men,
many of them that are walking the
streets today and living on charity
who once had good jobs in these
mills and cannot get one anywhere
because they thought more of these
trouble-makers than the welfare of
their families.

I challenge anybody to show me
just one instance where a strike in
any mill in South Carolina, the way
they were pulled and the demands
they made, was a success. The only
thing they got out of it was a short
vacation and an empty stomach and
the pleasure of seeing the trouble-
makers go some place else to do their
work. Let me say here I do believe
that if any one or a group of workers
have a grievance to settle would first
go to the management with it and
not to some outsider there would not
be so much strife among employers
and employees as there is today and
why they don't I can't understand.

Now if I am wrong, someone show
me and I will hush up and not say
more. Why not let well enough alone,
boys? Be sure you are right before
you start because the rest have been
wrong in some way or other and
have in the end suffered and lost the
once good friendship of the company
in which they worked for.

Furman R. Galloway.

Victor Mill, Greer.



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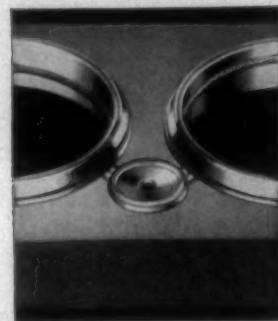
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